RR

ADVANCED MANAGEMENT

MARCH 1954

SOCIETY FOR ADVANCEMENT OF MANAGEMENT
SAM

VOL. XIX NO. 3

In This Issue . . .

SOCIETY FOR ADVANCEMENT OF MANAGEMENT

The Pioneer in Management Philosophy

Ninth Annual Industrial Engineering Conference
featuring

CREATIVE TIME STUDY AND METHODS

Wednesday evening, April 28, 8-10 pm:

Get Acquainted Party (Cocktails)—free to full conference registrants

Thursday morning, April 29: concurrent sessions beginning 9:15

CREATIVE SELECTION AND TRAINING OF INDUSTRIAL ENGINEERS

Selection of Industrial Engineering Personnel
Charles A. Thomas, *Mgr., Ind. Rel. and Ind. Engineering, Standard Pressed Steel Co., Jenkintown, Pa.*

Training of Industrial Engineering Personnel
Nicholas A. Martucci, *Management Consultant, Hillside, N. J.*

discussion

CREATIVE APPROACHES TO MATERIALS HANDLING

Tomorrow's Materials Handling Methods
Matthew J. Murphy, *Editor*, Carroll W. Boyce, *Associate Editor*, and Robert S. Rice, *Industrial Production Editor, Factory Management and Maintenance*

Standard Performance Times For Fork Trucks
Oswald S. Carliss, *Director of Engineering, Materials Handling Div., The Yale & Towne Mfg. Co., Phila.*

discussion

Thursday luncheon: 12:30

Cost Reduction Through Private Development of Electric Power
E. J. Machold, *Pres., Niagara Mohawk Power Co., Syracuse*

Thursday afternoon, April 29: concurrent sessions beginning 2:30

CREATIVE MEASUREMENT OF OVERHEAD EXPENSE

Measurement of Maintenance Labor
J. C. Flynn, *Methods Supervisor, E. I. du Pont de Nemours & Co., Louisville, Ky.*

Measurement of Office Operations
J. Henry Parker, *Chief Engineer, Rath and Strong, Inc., Boston, Mass.*

discussion

CREATIVE PREDETERMINED TIME STANDARDS

Predetermined Time Standards in Needle Trades
Lea Terruzzi, *Industrial Engineer, LaResista Corset Company, Bridgeport, Conn.*

Predetermined Time Standards in Fabrication and Assembly
H. C. Geppinger, *General Electric Co., Bridgeport*

discussion

Thursday dinner, 7:00 pm

Freedom Within Enterprise
The Honorable James C. Worthy, *Assistant Secretary* of Commerce *(Administration) Washington, D.C.*

Friday morning, April 30: concurrent sessions beginning 9:15

CREATIVE ANALYSIS OF WAGE INCENTIVE PLANS

Auditing of Wage Incentive Plans
D. F. Howe, *Director of Industrial Engineering, Procter and Gamble Co., Cincinnati, Ohio*

Cost Reduction Including Wage Incentive Plans
Garland C. Martin, *Manager of Industrial Engineering, Ensign-Bickford Co., Simsbury, Conn.*

discussion

CREATIVE ADVANCES IN METHODS TECHNIQUES

Automation and The Industrial Engineer
Robert T. Collins, *General Sales Mgr., New Departure Div., General Motors Corp., Bristol, Conn.*

Advances in Statistical Controls
Mel Hurni, *Consultant, Management Consultation Div., General Electric Co., New York City*

discussion

Friday luncheon, 12:30 pm

W. L. McGrath, *President, Williamson Heater Co., Cincinnati*

Friday afternoon, April 30: concurrent sessions beginning 2:30

ARE WAGE INCENTIVES REALLY WORTHWHILE

Productivity Without Wage Incentives
Robert Pomeranz, *Pres., Roberts Co., Sanford, N. C.*

Productivity With Wage Incentives
Robert Jones, *Manager of Manufacturing, Jones & Lamson Machine Company, Springfield, Vt.*

discussion

CREATIVE COMPANY-UNION RELATIONS

The Industrial Engineer and Labor Contract Clauses
C. Jay Anyon, *Wharton School, Univ. of Pennsylvania*

Creative Arbitration
Rev. Dennis J. Comey, S. J., *Director, Institute of Industrial Relations, St. Joseph's College, Philadelphia*

discussion

Friday evening 5:00 pm: Cocktails

ADVANCED MANAGEMENT

MARCH 1954
VOLUME 19 NO. 3

Publisher: C. A. Slocum

Editor: Will Long

Production Editor .... **Gary A. Lewis**
Assistant to the Editor .... **W. S. Brown**
Editorial Assistant .... **Mary E. Cawthon**
Editorial Assistant .... **Christine Lombardi**
Research Editor .... **Dr. Vincent A. Flynn**
Assistant Research Editor .... **Jane H. Schotland**
Advertising Counsel .... **Frank E. Fehlman**

ADVANCED MANAGEMENT, published monthly by Society for Advancement of Management, 74 Fifth Avenue, New York 11, N. Y., is merged with MODERN MANAGEMENT, and is successor to The Society for the Advancement of Management Journal, the Bulletin of the Taylor Society and of The Society of Industrial Engineers. Re-entered as second-class matter, December 23, 1949, at the Post Office at New York, N. Y., under the Act of March 3, 1879. Copyright, 1954, Society for Advancement of Management. Subscription rate: $8.00 per year. Single copies: 75 cents (members); $1.00 (non-members). An index to ADVANCED MANAGEMENT is published annually, and the contents are also indexed in Industrial Arts Index which is available at Public Libraries. Notification of address changes must be given at least four weeks in advance.

CONTENTS

Bulldozer for an Economic Earthquake . . .

THE IMPORTANCE of the President's message in annual reports is a new business phenomenon. Relationship of assets to liabilities is still an index of company stability; once this section overshadowed the rest of a company's statement.

But shifts in markets have worked in a strange but logical way to focus attention on present plans and future aims of management, far more than upon its past accomplishments.

This is because a few important, seemingly unrelated facts have brought about an economic earthquake.

In the last ten years, the whole prospect of America's population has changed. More family units exist. Concentration is away from big cities. Living habits, spending proportions of a given dollar have altered. Age groups, their prenatal numbers once World War statistics, have grown into widely-separated, important buying markets. Management men were first to feel the moving economic landscape.

Necessity for new marketing techniques fell upon key personnel; the burden of strategy made new demands. Management became the bulldozer to dig to future progress. Alert management men moved together to learn how to meet the shock, to search for new methods, to explore new thinking. Success could no longer be gauged by past performance.

The SAM membership, recognizing early the strong economic impulse, became more active, more vigorous. In Chapter meetings, conferences, through their publications, leaders in management sought to discover techniques to give them perspective in planning for the future. These are the men who will make the company strategy reflected by the President's annual message.

They are men who know what goes on in their field. They also know what is happening in business and industry as a whole. They know to be well-informed, forward-looking in their approach, advanced in their understanding of the broad business vista.

It is natural that the growth of The Society for Advancement of Management should parallel a sharp shift in the economic balance of the country. Alert to the future, SAM takes pride in the advantages its members bring to the growing strength of that important piece of management literature, the President's Report.

BRUCE PAYNE, PRESIDENT, SAM

A Description Of The Analytical Approach To Industrial Purchasing

by Andrew M. Kennedy, Jr.,
assistant General Manager, Purchases,
Westinghouse Corporation, Pittsburgh

The first thing an analysis of the purchase of materials for any business shows, claims this author, is that four major decisions are involved in every purchase. Is it the right quality, right quantity, will it be delivered on time, and is the price right. The first three affect the last. But how can the answers be determined, and what follows? Here a writer who has spent his business career in the purchasing field tells exactly what happens when purchasing is given a scientifically analytical approach—what the answers to the four all-important questions are, where those answers lead, what helps and hindrances can be expected, and what final results can be attained

---

THE total Gross National Product of this great country in 1952 was about 346.6 billion dollars. Out of this staggering total, about 130 billion dollars was spent by Purchasing Agents. In a company like my own, 45 per cent of every sales dollar is invested with supplier companies who make the materials and parts and provide the services to keep 119,000 people busy producing nearly a billion and a half dollars' worth of product. Last year about 350 buyers in our purchasing organization spent 700-million dollars — wisely. That's an average of over two million dollars each in a year's time, or a thousand dollars every working hour!

This is a responsibility of the first order—one that is recognized as a major contributor to the profitability of our company. Certainly the procurement function requires organization and administrative ability to the same degree as other major functions such as engineering, sales, finance, manufacturing, etc. Beyond that, it requires specialized technical knowledge and abilities that are unique in the industrial field. In addition to technical know-how, a purchasing agent and his men must be unusually capable practitioners of the art of human relations, which is sometimes more akin to black magic than to scientific principles.

First, I'd like to tell you about the scientific aspects, or the analytical approach to purchasing. Science is merely knowledge coordinated, arranged, and systematized. How do we apply these processes to industrial purchasing?

Let's break it down to basic fundamentals as they may be involved with a single purchase. To sustain production of useful goods, we need materials—sometimes in a bewildering variety—of suitable quality, in the proper quantity, delivered at the right time, at a price which will permit us to convert it at a profit.

At least four major decisions must be made for each purchase: Is this the right quality of material? the right quantity? will it be delivered at the right time? is the price right? The first three considerations affect the last, and the matter of price cannot be resolved at all without answers to the problems of quality, quantity and delivery. The rightness of all decisions in the area of price depends entirely on how accurately, how thoroughly, and how efficiently an organization relates these considerations to one another. The purchasing agent is concerned with the relative importance of these factors as they affect the economics of buying—and has the sometimes dubious distinction of being the referee between widely divergent viewpoints.

For example, an engineer may specify a material which is proprietary, or has only one source of supply. That source may not be able to deliver at the time the Production Department needs it. The quantity called for may be smaller than the supplier considers an economical manufacturing quantity. It remains for the Purchasing Department to reconcile all of these points of view, to advance its own objectives for lowering product costs, and to meet the profit objective of the company.

The objectives of a Purchasing Department are to make money for your

company. It exists to do two things:

1. Provide all the necessary materials and services you need, at the right quality, and
2. To obtain the maximum value of all expenditures.

A Purchasing Department that meets the first objective and goes no further is providing a valuable clerical service and no more. They are probably considered clerks and paid like clerks.

To get further than the first part of the job requires imagination, ingenuity, analytical ability, courage, administrative talent, and salesmanship to an unbelievable degree. A Purchasing Agent who fulfills all the implied responsibility of the value objective compares to the clerk as the Chief Engineer of General Motors compares to the local garage mechanic. To keep them running, you need tools, some technical know-how, and luck; but to put a better competitive product on the highway every year, you need vision, planning, and real management talent.

So, a top-flight Purchasing Agent must be an active, effective member of the management team—engineers, methods men, production planners, manufacturing men—dedicated to the objective of cost reduction. Rising labor and material costs and increased tax burdens have squeezed profit margins to ridiculously low figures in the last few years. Higher prices have only been a partial answer, and increased volume requires tremendous expenditure for expansion. The cost frontier is where the battle for leadership is now being fought—and Purchasing Agents are carrying their share in our Company.

Four Ways To Implement Cost Reduction

A formal, systematized approach to the problem is not only desirable, it's fundamental to our survival. Like any major undertaking, it depends on the willingness of individuals to recognize a common goal and to work effectively in concert to accomplish it. The whole program is successful in direct proportion to the ingenuity quotient of the working force and the intensity of their sustained effort. Both of these require management recognition as a stimulus.

Several principles are of extreme importance in cost reduction work:

1. Management must set goals which are realistic, yet difficult to attain.
2. Teamwork between departments and individuals is the keynote; anything which weakens group cooperation must be eliminated.
3. Credit for accomplishment must not be arbitrarily allocated between departments or individuals on a percentage basis; it must be given to all the participants on a total-share basis.
4. To be creditable to management, cost reductions must be audited and verified by an independent department.

In cost reduction work the Purchasing Department puts first things first. We analyze the things we buy and classify them by value and annual volume. This way we concentrate our attention where the greatest savings are apt to be discovered. We can afford to spend a lot of time on a commodity we buy one million dollars' worth a year; a 1 per cent reduction in cost would save us $10,000 which is nice money. If we have a potential saving of a hundred-thousand dollars, there are few things we can't afford to do.

Suggested Check-List For The Shrewd Buyer

I've always said curiosity may kill cats, but a buyer without it is dead and doesn't know it. A curious and ingenious buyer just automatically asks himself many of these questions when he gets a request to buy:

Is this the right quality for the application?

Does it have any unnecessary properties we're paying for?

Will another supplier sell it cheaper?

Is a quantity discount available for large quantity?

Could a cheaper material or part do the job?

Can it be made by a different process, cheaper?

Is its cost in proper relation to its value as a part of our product?

Can anyone else buy it at a lower price? If so, why?

Many of our divisions attack the problem with a committee of experts—buyers, cost men, engineers, manufacturing specialists—who ask each other these questions concerning each material and component of our product, one by one. This kind of session is like a mental ping-pong game with six or eight players; ideas come out so fast a secretary has trouble recording them. One session recently on fourteen parts of a product generated sixty-one cost reduction ideas, most of which will pay off in real dollars. The productivity of this group is much higher than the sum of their individual efforts would be; there is an indefinable spirit in the group approach to a common problem that produces amazing results.

Dramatic Savings Result From Analytical Buying

Let me give you a couple of examples of some really dramatic savings resulting from buyers' ingenuity and the analytical approach:

1. Here's a typical one involving ingenuity. It's the sort of thing that makes you wonder why you didn't invent the safety pin. One of our divisions uses a large tonnage of special-grade steel daily. An alert buyer noticed in the shop one day that disposing of the skids on which the steel was shipped seemed to be quite a problem. He also discovered that we paid 5¢ per cwt. for that type of package. It wasn't hard to convince the trucker that he should build simple racks on the bodies of his trucks for this particular purpose, thus eliminating the packing extra. The total savings were $37,000 in the first year.

2. Large forgings for expensive gearing units were made from discaloy. In the process of reviewing all parts and materials of the units, this stood out as most expensive in relation to function —$9 per pound. Purchasing and engineering began to work on the metallurgical problem and came up with a substitute material at $2.70 per pound. Much testing was involved and, of course, final approval of the customer. Saving on this and other parts of similar type was $240,000.

3. One division was going to buy a large number of stainless steel annealing fixtures for use in shop processing. The buyer dug into the problem and actually convinced our manufacturing engineers that they needed only about half the number they had intended to buy if certain revisions were made in shop-routing of the parts. This first move eliminated $129,000 from the total bill. The buyer also requested that the fixtures be made out of castings instead of stainless steel plate, and although they couldn't wait for the entire order on this basis, the few castings they did buy saved another $4600. Westinghouse saved $11,000 by purchasing the material and furnishing it to the fabricators, and $800 by eliminating one design feature. By the time all of these changes were reflected in the original design and several additional suppliers were brought in, another $28,500 popped up in terms of negotiated saving. The total

for this single job amounted to $173,900.

Savings like this are dramatic. There are hundreds of small projects which depend on the ingenuity and analytical ability as well as salesmanship of buyers and cost reduction engineers. A few figures from 1951 should serve to convince you that this is a large-scale program and one in which management is sincerely interested. During 1951 we completed over 2500 individual projects having a value of about $6,000,000. Our top man during the year participated in $413,000 worth of cost reduction. We had four men over $200,000 and 15 men over $100,000 and 80 men over $10,000.

Purchasing Research Leads To Further Efficiency

Most large corporations now maintain Purchasing Research Departments to make the serious commodity and market studies which are productive of tremendous savings. World supply prospects, industry costs, seasonal price trends, are well within the scope of these analysts. Their studies lead to further refinement of buying methods, promote new and more economical manufacturing processes, and may even change the complexion of their product. Here are the questions for such a research group:

1. Under what conditions and for what types of commodities should our company enter into contracts?
2. What is the long-term future price relationship of copper and aluminum? of fuel oil versus coal?
3. Over the next ten years, will the price relationship of copper and high-grade core iron change? Which will be favored?
4. From the purely economic viewpoint, where should each of the 24 company divisions buy their various steel products? How would this distribution change our present costs?
5. How do outside market conditions affect purchasing costs?

I think you'll agree that research implies a scientific and analytical approach.

U. S. Steel Corporation is going into purchasing research in a very thorough way. They believe as we do that the same principles that have worked so well in selling and market development can be applied with equal success in Purchasing. Their department will function on a broad basis as an arm of the Purchasing Division, and is expected to give the buyer more and better tools to work with. The department will develop and analyze information on supply, prices, inventories, consumption, and new commodities, and will forecast future availability of materials. Solutions to specific purchasing problems will be one of its jobs; and, of course, it is expected to warn the Buyer Organization on shortages and to help to develop substitute materials.

The Purchasing Agent's most precious asset is time. If his Production Department doesn't give him the necessary time to do a good negotiating job, he winds up spending all of his time just expediting the material without regard to its cost. To go one step further, if the inventory control operation in his plant is faulty in that its decisions of when and how much to buy are poorly made, the Purchasing Department can turn into a fire-fighting brigade. Nobody reckons the cost when he pulls a fire alarm, and a buyer who knows the plant is going to shut down next week unless he places an order today doesn't have time to shop; he just buys it from the man with the best promise.

Much Waste Due To Restricted Negotiating Time

You may think this is an isolated occurrence, but it isn't. The Purchasing Departments of our Divisions publish lead time charts, giving the necessary procurement time for everything we buy. Regardless of this, most Purchasing Departments have a chronic condition of 20 to 30 per cent of requisition received with inadequate time to do the buying job. So it's a real problem. It requires that every order be carefully followed (contacts with the supplier averaging four or five to every order) to make sure of delivery. The collective waste of negotiating time is appalling.

Small orders and lots of them are a Purchasing Agent's major headache. Ben Franklin once pointed out the trouble that loss of a horseshoe nail could cause, and no one appreciates his little jingle more than the Purchasing Agent. Lack of a single washer or a screw can make a giant assembly line grind to a halt; it makes no difference that these things are worth a fraction of a cent, or that enough to keep the factory going for days could be put in an aspirin box. The industrial Bill of Material is full of these widgets, insignificant in cost, but tremendous in the propensity to cause trouble.

Preoccupation with small order trouble has caused many a Purchasing Agent to begin digging into Inventory Control. Many companies including my own, recognize his knowledge of many basic factors affecting inventory control. In the policy field, he is the one man who knows market conditions and can set inventory levels based on availability. Who better knows costs? or how long it takes to get things? or which supplier is apt to ship on time? The answers to the questions of how much to order and when, require this kind of knowledge, applied constantly and to each decision. Let me tell you how we have approached the problem.

Several things about our Inventory Control approach looked screwy. We seemed to be placing too many small orders, under $20, and having too many troubles with the same items month after month. And it didn't make good sense to order two dollars' worth of the same washer every other month, when a $10 order would have kept us out of trouble for nearly a year. Fundamentally, to use the same policy on things worth .001 as you used on complex parts worth $10 each didn't make sense.

So we started to analyze the true costs of carrying and replacing inventories. We saw right away that all inventory had to be put into a common denominator, dollars, rather than pieces, feet, pounds, or tons. Investment cost, we found, was directly related to the basic decisions of how much to buy and how much to carry in inventory; replacement, or purchasing cost, directly related to the decision of when to buy or how many times a year we buy a single item. This Purchasing Cost, while almost insignificant in percentage on large-value material, was a large factor on small-value items. In some cases the cost of buying these items was more than the material was worth over a year's time.

A Revolutionary Approach To Inventory Control

Equating for both elements of cost, we soon worked out a relationship which told us that the lowest total cost of operation was one in which the carrying cost and replacement cost during a year were equal. And for each item in an inventory, there is an economical ordering quantity which yields the lowest possible cost of operation. This was, we thought, a real revelation, one that could revolutionize our Inventory Control approach. So, being young and fearless, and not as concerned over being fired as we should have been, we

tried it out on a block of our inventory.

The results were staggering. We only knew in a general way what to expect. Here's what happened:

—Number of Purchase Orders decreased by 40%.

—Number of open Purchase Orders fell about 30%.

—Stock-outs reduced magically to less than half.

—Inventory level rose about 10% as we order large quantities of small-value material and then fell to about 20% under our previous level.

—Inventory availability and balance was improved.

—Because we had less orders to place, buyers began to negotiate effectively with the extra time.

—Because we had less open orders to follow, we needed fewer expeditors.

—Management found inventory could be reduced, with less trouble from outages; and thus, costs were reduced.

—Everyone was happy including suppliers, who now received larger orders at less frequent intervals on small-value materials. Suppliers of active large-value items got the benefit of better scheduling which our additional time permitted.

Buyer Must Know People As Well As Products

Science and the analytical approach to purchasing are wonderful things, but they don't make Purchasing Agents. The most penetrating analyst, the most methodical investigator, and the technical tycoon are likely to be the greatest dull thuds the Purchasing profession has ever seen. Why? Because of people—the old human equation. They are most susceptible to the idea that people react and behave in a logical way. They don't.

Why is the human element so important to a Purchasing Agent? Because he buys what another Department has decided is needed, in quantities determined by others, at a time chosen by others. To the extent that their decisions are rigid, impossible to modify, the area of his effectiveness is narrowed to one of fire-fighting and bargain hunting. His authority does not extend to determining what quality is needed—that's an Engineering decision — or to how much is needed, or when—those belong to the Production Department or at least another Department. And yet, to do a creative job, he must be able to influence these decisions. He must earn the authority to modify courses of action already decided by others in positions of equal or lower status in the organization. If that isn't a problem in human relations, I never saw one. To the extent that he fails in this, all the analysis in the world will not make him a nickel. And if he fails, make no mistake about this, he becomes a clerk in the eyes of everyone on his own level and many levels below him. Sometimes he even loses the right to make decisions he should be entitled to make because of the unpredictable human faculty for smelling out failure. Pretty soon maintenance men are telling him what to buy, where to buy it, and at what price. And what's more important, they'll prove that what he wants to buy won't work. They won't let it work. Authority is always granted from below, not bestowed from above!

Here's an example of the amazing human ability to justify emotional decisions on scientific grounds. One of our Divisions uses large limousines to transport customers and suppliers between the railroads and Plant. A form came through recently advising us of their purchase of a Cadillac Limousine whereas they had had a Chrysler before. The Equipment Man had built up the most beautiful case about the superiority of a Cadillac over a Chrysler that you have ever seen, detailing all of the unusual costs of maintenance involved, commenting on the poor local service from the Chrysler Dealer and so forth. The funny part of it was, I had been in that Division too once before and had prepared the same kind of a report changing from a Cadillac to a Chrysler. The facts of the matter were that the Division Manager in my time preferred Chrysler products and the new General Manager preferred Cadillacs. This was all that had to be said; and, of course, it wasn't mentioned.

What Makes The Successful Purchasing Agent

I think we can come to the following conclusions concerning the analytical approach to Purchasing:

1. Purchasing Agents are using the latest and most penetrating methods of analysis in approaching their everyday problems.

2. Some of the fields involved are in cost analysis, inventory control, and purchasing research. These don't describe the full field of a Purchasing Agent's contribution; they simply indicate those areas in which my own Company happens to have done the most work.

3. Without a highly developed talent for human relations, a Purchasing Agent never gets a chance to do any of the things we've mentioned here. His authority to make decisions for other people must be delegated by his associates, and can never be bestowed on him by his superiors. Chester Barnard, one of the world's great authorities on executive thought and action puts it this way: "The only way to obtain confidence is to deserve it." END

Individuals Determine Organizational Structure

Unfortunately, organizational theory does not ordinarily recognize the personality factor. In reality, this is apt to be an important if not a controlling consideration in determining the organizational structure of any agency. The desire or need to accommodate a certain individual may lead to modification in structure simply for the benefit of that individual, or because consideration accorded him may secure more important advantages. It has happened, for instance, that the entire field organization of a great agency was adjusted to one top man who insisted that he could "work" only in a direct command relationship to field installations. Many a reorganization has been wrecked on the reef of personality. The student in the classroom or the writer on organization may pretend that personality factors are unimportant; the administrator, in determining organizational structure, may ignore them only at his own peril.

We may hear someone say, upon looking at an organizational chart, "It may work; it all depends upon the individuals who are assigned to run it." In the present state of our knowledge about public administration, it is probably as sound to pick key individuals and build the organization around them as it is to establish the administrative structure and then seek the individuals to fill the key posts. . . . *from Working Concepts of Organization, by John D. Millett.*

The Strong Case For Standardization Of Modern Business Reports

by S. W. Rolph, President
The Electric Storage Battery Co.

The growing importance of business reports of all kinds brings to the fore a management problem that businessmen have been feeling for some time. The over-all standardization of reports, particularly those that appear at regular intervals to give a certain type of information at stated times (the stockholders' report), seems a management operation that is bound to come. The movement is nationwide; farsighted management men look forward to the day when all reports of a given type look the same across the nation. Here is a basic, practical article from the head of a large firm who has already taken positive action in this area of advanced, modern management thinking

MUCH valuable time is wasted because of improperly prepared reports. Failure to standardize makes it necessary to read irrelevant "signposts" month after month. Following the pathways of information through a report is in many respects similar to driving an automobile over the highways. After traveling the right routes a few times, we become familiar with all the turning points and it becomes no longer necessary to pay such careful attention to signposts, provided, of course, they are not changed so as to require time-consuming detours.

Headings at the top of columns in reports are signposts. If they are standardized and remain in the same places year after year, they enable us to become easily familiar with the shortest routes to each kind of information we want.

A sense of direction or purpose should be used in the design of each report. The time of everyone expected to read the report is saved and comprehension of the content substantially improved. Our way of living in business requires consideration of many reports. This can be done understandingly in a minimum of time, if the readers of reports are considered by the report makers and if executives inspire and require the making of better reports.

Frequently reports are not made up with a sense of direction. Many are compiled free-standing, without relation to either the manner in which the same information was presented last month or the form of other reports which are to be read by the same executives.

From an artistic point of view, a good report will be symmetrical, with the main title centered at the top of the page. But if the report has been folded, the title is obscured and it becomes necessary for the reader to open each report in order to ascertain its content. If the purpose of the report is to save executive time in reading and comprehending the information contained, a standardized procedure should be adopted. For example, place the title at the upper right-hand corner, the most accessible spot on the page.

Being convinced that success in life consists of doing small things well, the management of The Electric Storage Battery Company made a study of its reports and their effectiveness. The result has been standardization and simplification. Methods have been used in preparation so that readers can easily locate and quickly read all key information. The procedures are sensible, simple, easy to apply to any business. They may be profitably utilized by any member of The Society for Advancement of Management.

The Basic Consideration: Who Will Use It?

The underlying principle governing the preparation of all business reports of our company is consideration for every person who must use the report. This is true whether the reader is a member of the Board of Directors, an officer and member of management, or anyone else in a supervisory position. Irregular sizes have been abandoned. They require special books for binding, special filing cabinets and special transfer cases. Lack of uniformity in the makeup of reports has likewise been abandoned. This lack of uniformity

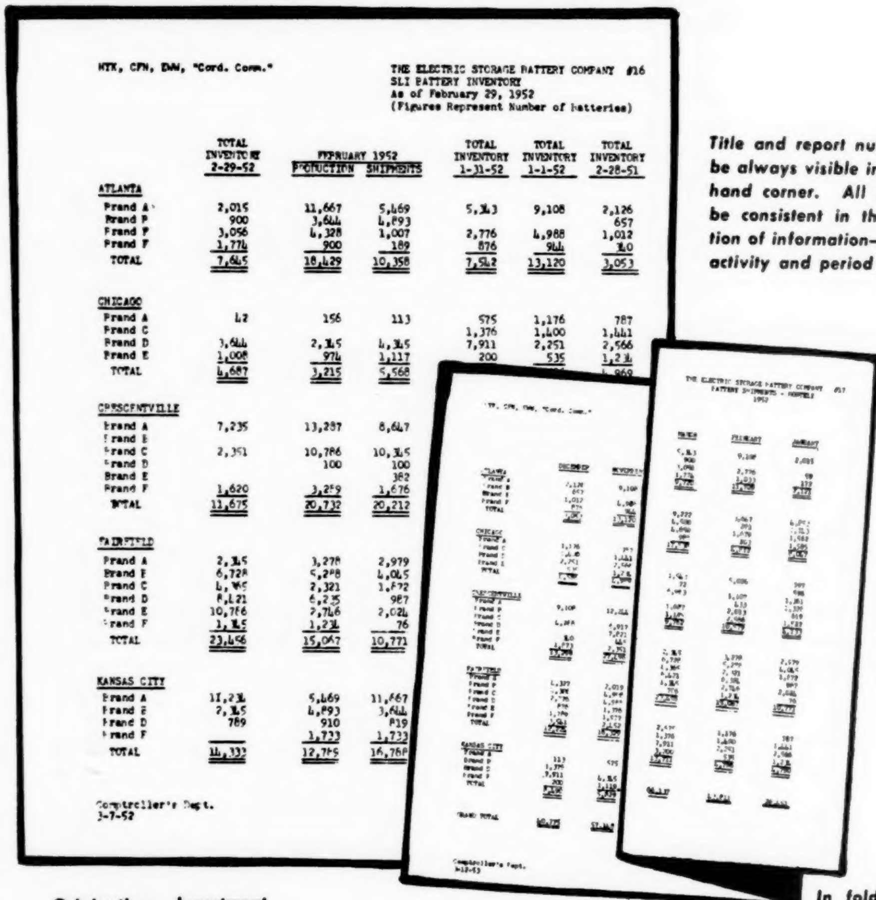
We Do Do This!

Initials of recipient for report distribution.

Current news is always placed on left, except on charts and graphs.

All information is arranged for quick, easy reading from left to right.

Adequate margins are allowed so that no information is obscured by the binding.



HTK, CFN, EWW, "Cord. Comm."

THE ELECTRIC STORAGE BATTERY COMPANY #16
SLI BATTERY INVENTORY
As of February 29, 1952
(Figures Represent Number of Batteries)

	TOTAL INVENTORY 2-29-52	FEBRUARY 1952 PRODUCTION	FEBRUARY 1952 SHIPMENTS	TOTAL INVENTORY 1-31-52	TOTAL INVENTORY 1-1-52	TOTAL INVENTORY 2-28-51
ATLANTA						
Brand A	2,015	11,667	5,469	5,343	9,108	2,126
Brand B	900	3,644	4,893			657
Brand E	3,056	4,328	1,007	2,776	4,988	1,012
Brand F	1,774	900	189	876	944	340
TOTAL	7,645	18,429	10,358	7,542	13,120	3,053
CHICAGO						
Brand A	42	156	113	575	1,176	787
Brand C				1,376	1,400	1,441
Brand D	3,644	2,345	4,345	7,911	2,251	2,566
Brand E	1,008	974	1,117	200	535	1,234
TOTAL	4,687	3,215	5,568			4,969
CRESCENTVILLE						
Brand A	7,235	13,287	8,647			
Brand B						
Brand C	2,351	10,786	10,345			
Brand D		100	100			
Brand E			382			
Brand F	1,620	3,259	1,676			
TOTAL	11,675	20,732	20,212			
FAIRFIELD						
Brand A	2,345	3,278	2,979			
Brand B	6,728	5,288	4,045			
Brand C	4,365	2,321	1,872			
Brand D	8,421	6,235	987			
Brand E	10,786	2,746	2,024			
Brand F	1,345	1,234	76			
TOTAL	23,456	15,067	10,771			
KANSAS CITY						
Brand A	11,234	5,469	11,667			
Brand E	2,345	4,893	3,644			
Brand D	789	910	819			
Brand F		1,733	1,733			
TOTAL	14,332	12,765	16,768			

Comptroller's Dept.
3-7-52

Title and report number should be always visible in upper right hand corner. All titles should be consistent in the identification of information—that is, the activity and period covered.

Originating department and date of issue.

In folding 17x11 inch sheets, the first fold should be 8 inches from the left, the second fold 4 3/4 inches from the right. This will automatically allow for 1/2 inch overlap which permits easy opening of page.

We Do Not Do This!

1—We do not make reports which run from bottom to top of pages, or parallel to binding because this compels reader to twist report or neck sideways to study information. Also, information on charts and graphs is arranged on 8 1/2 x 11 or 17 x 11 sheets for quick, easy reading of all information from left to right.

2—We do not deviate from our standard size sheets, (8 1/2 x 11 or 17 x 11). No pages are used which must be given odd folds to come within the 8 1/2 x 11 dimensions of the report.

3—We do not vary positioning of titles and repetitive captions, thus aiding quick location of information.

4—We do not present unbroken, vertical listings of material. Related information is grouped and arranged by adequate spacing to facilitate easy following of figures across the page.

once required complete reading of each report, because no one was sure of its content otherwise. Having our information presented in a uniform manner, one presently learns his business and knows just where to look for the significant information on a particular report. That information will not be found in the second column in one month and the fourth column in another month. Some of our old reports listed current information in the right-hand column of the page, others listed similar news in the left-hand column. We have standardized—the news is always in the left-hand column and the history toward the right. In America we read from left to right and therefore see our news first when reading our company reports.

Standard Margin Facilitates Binding, Reading

Frequently insufficient margins caused important information to be hidden in the binding of the report. Today we have a standard margin which makes it possible to properly bind and at the same time readily read all of the report. We have also adopted as standard, the placing of all information on the sheet so that it may be read with the report upright and a whole book full of reports may be read without turning the book around to say nothing of turning it upside down. This analysis of our various reports was conducted by Mr. A. L. Mettler, Manager of our Systems and Procedures Division and a member of SAM. A study disclosed the fact that many reports had been prepared without enough consideration of their end use. For instance, study showed that all of our reports could be properly prepared on standard size (8½" x 11" and 17" x 11") sheets of paper for binding in books which could be conveniently handled in a board room, at a desk or while travelling. Uniformity of size enables easy filing.

Orderliness Compensates For Loss of Individuality

A certain amount of individuality and artistic effect are lost by standardization, but the sense of order, of information being systematically presented and the ease with which reports can be understood, because of wasted effort being eliminated, has been a worth-while substitute for artistic appearance.

Through my experience with organizations, governmental as well as business, I know our former methods of preparing business reports were by no means unique. From our earliest school days we have been taught to prepare reports from a variety of points of view. The work covered by this article had one point of view, one sense of direction, one purpose; namely, to conserve the time of the reader and improve his understanding of the content of reports.

Human nature does not take readily to standardization; it is our privilege, however, to make progress through self-discipline. We can discipline ourselves to seek and follow better ways of doing our work. We can discipline ourselves to the improvement which comes from standardization of better methods. To innumerable complaints against preparing material to our standards, we have adopted one reply; "Have you tried to make the standard method work?" We have not yet had a complaint that the standardization was not workable after trying to make it work.

To lighten the load of paper work and to have business better understood in less time by more people, the results gained from standardizing one's business reports will be well worth the effort.

Reports Must Be Read, Handled, Understood

The illustrative material accompanying this article shows how the application of systematic methods makes reports easy to handle, read and comprehend. This is their main function as management tools. The illustrations prepared by A. L. Mettler will be useful to readers of ADVANCED MANAGEMENT because they clearly show and simply explain (1) inefficient time-wasting habits of reporting and (2) simple, easy ways to apply common sense methods in preparing reports. **END**

FOR ALL PRACTICAL PURPOSES . . .

Interpretive comments prepared by the controller or accounting department should accompany reports and statements submitted. This will ease the burden of evaluation and add to the utility of the reports to men who are not too familiar with the practices and policies of financial reporting. If the reports are informative and readily understandable by the men on the firing line, they will be read with interest and used for the purposes intended. If they are complex and full of minor statistics, they will be discarded by the busy production executive. Controllers (for instance) must realize that their financial reports are read by individuals who often have not the facility to think in monetary terms as the accountant is trained to do.

Too often, financial reports look like a mass of numbers, and as such, would frighten a casual reader. A report is far more readable if all insignificant figures are deleted. It is now common practice in many organizations to eliminate pennies from most statements. Why not go further? For all practical purposes, is not the nearest hundred dollars enough on certain major reports? A review of internal financial statements will quickly indicate the extent that unnecessary digits can be eliminated without reducing the value of the data.

Similarly, unit costs are often expressed in terms that confuse rather than clarify because too many digits are shown. The first approach to this phase of the problem is to consider the quantity unit used. Should it be piece, dozen or gross, or should it be pounds, hundred weight or tons? The largest feasible unit should be used but it must be used consistently throughout or confusion would result from changing of units. The larger units not only reduce the insignificant digits in the quantity measure but also in the unit price.

The determination of the number of digits after the decimal point would vary depending upon the usages. For costing purposes in the actual accounting records it is often necessary to use four, five, or six digits. However this should not be carried through to the finished report. For all practical purposes the nearest mil is often sufficient. Thus the figures are easier to comprehend and the reports easier to read . . . ***from "Financial Reports to Plant Operating Executives," by Adolph G. Lurie, in The Controller, December 1953.***

How The Public Looks At Management's Problems

by Robert H. Laws,
Director of Economic Programs, SAM
and Charles J. Tobin,
Director, Bureau of Business and Economic Research, Marquette University

This is the second of two articles on the SAM Milwaukee Chapter's outstandingly successful "You Be The Boss" contest (AM, February, '54). In it two authorities in the field give an analysis of the economic opinions expressed in the "You Be The Boss" contest as it was sponsored by the Milwaukee Chapter

It is always interesting to know how "the other fellow" responds when faced with the responsibility for solving some of your own problems. The desire to have a large and diverse number of "other fellows" put themselves in the position of solving some of management's basic problems was one of the primary motives for the widely publicized "*You Be The Boss*" contest, held in connection with the Wisconsin State Fair in August, 1953, and sponsored by the Milwaukee chapter of the Society for the Advancement of Management.

The questions asked of the contestants were related to a "real" situation, dramatized by means of an exhibit at the Fair consisting of an antiquated "factory" which actually produced wheelbarrows in a consciously inefficient manner.

This obviously outmoded production of wheelbarrows not only made for an interesting exhibit, but provided a "live" basis from which the contestant could express his views on matters such as production methods, materials, safety, costs, sales, prices, profits, and dividends. While it was not necessary to see the assembly line in order to enter the contest, it is believed that the vast majority of entrants did see the exhibit. An estimated 53,000 questionnaire ballots were distributed, and over 9,000 completed forms were returned.

This interesting activity had a number of objectives. Certainly, the individual improved his understanding of business economics. In addition, and perhaps more important, employee appreciation of management problems was developed as a result of "being the boss" for purposes of "solving" certain basic problems. Finally, if the opinions of a cross-section of the population with respect to a number of typical management problems involving fundamental economic concepts such as productivity demand, costs, prices, and profits, were analyzed and presented in an organized manner some further insight into this area might be provided.

It was with this objective in mind that arrangements were made with the Bureau of Business and Economic Research, College of Business Administration, Marquette University, to tabulate the data in the returned questionnaire. An interesting sidelight here is that the physical counting and tabulation of over 9,000 questionnaires was done by the students of the College of Business Administration, who are members of Delta Chapter of Delta Sigma Pi, national business fraternity. Sixty-five "Delta Sigs" devoted day and evening hours to this task as a service project to the University. No class time was utilized and no credit was given in lieu of class assignments.

The contest results had a number of drawbacks as a research vehicle. The contestants were not "selected" in the sense of a random sample of any well-defined "population." Therefore, the results must be applied only to those actually filling out questionnaires. However, virtually all economic groups in the population were represented and 9,000 is a considerable cross-section of the population of the Wisconsin area. Secondly, since this was a contest, offering considerable return in the way of prizes, contestants may have been drawn largely from that segment of the population which normally enters contests and even these may have given answers they felt would be judged as correct by the judges. Nevertheless, some knowledge of management problems must be pre-supposed in order to give the desired answers. Thirdly, contestants were limited to only the choices offered, in all but one question and they were permitted to check more than one choice. Finally, in some questions, more information might have been given in order to elicit a more meaningful response. Yet these weaknesses are similar to those to be found in most survey research and it is felt

TABLE I *

Problem Number 1

Your employees demand that you grant a ten-cent-an-hour wage increase.

Choices Offered	Number Entrants Checking	% of Entrants Checking
Find out how the 10¢ increase would affect your cost, selling price and profit.	6840	75.4
Tell your employees exactly what your position is and why you can or cannot give them more money.	5731	63.1
Check with other industries and find out if your rates are in line with the area average.	3927	43.2
Explain your financial condition of last year and give them your opinion as to what the future holds for the company.	3499	38.5
Give them 5¢ and put the other 5¢ into new equipment, so that you can reduce the cost of your wheelbarrow.	1478	16.3
Put all of the production employees on a piecework basis.	1217	13.4
Ask the government to act as judge as to whether or not the increase should be granted.	482	5.3
Tell your employees that if they give you more effort on the job you will give them the 10¢.	481	5.3
Offer them 5 cents and promise them more next year.	383	4.2
Tell them that you can't afford it at this time.	330	1.5
Ask the employees if they wouldn't want a shorter work-week at their present rate of pay instead of more money.	216	2.4
Grant the increase and raise the price of the wheelbarrow.	140	1.5
Deny the request for an increase and instead buy all new equipment to build a better wheelbarrow.	127	1.3
Immediately grant the 10¢ increase.	43	0.5

* Items appear in the table in the order of frequency of response and not as they did in the contest blank.

that these weaknesses are more than equalized by the fact that such a large group of people were motivated to express their frank opinions on key business problems thus exposing, perhaps for the first time, areas of understanding and of confusion on these problems.

Those entering the contest were furnished a four-page questionnaire in which a total of seven management problems were presented and a number of solutions, ranging from five to fourteen, depending on the question, were suggested for each problem.

All of the contestants operated from the assumption that their company "manufactures wheelbarrows in competition with several other strong companies. It produces 30 wheelbarrows per day with 11 hourly-paid employees and 10 machines. It pays wages equal to what is being paid to employees in similar industries in the area. Wages account for about one-half of its total operating costs. Last year it made a profit, after taxes, of 2½ cents on each dollar of sales."

With this information given, the individual was asked to assume the role of the "boss" and express his opinion as to the *most practical solution* to each of the seven problems by checking one or a combination of the solutions offered to him. The seven problem situations are as follows:

1. Your employees demand that you grant a ten-cent-an-hour wage increase.
2. The demand for all wheelbarrows has suddenly dropped 'way off, and in addition, the price you are asking for your wheelbarrow is higher than your competitor's.
3. The customers' demand for your wheelbarrow has become greater than your ability to produce them with your present equipment.
4. Although you are selling all the wheelbarrows you can make, and your prices are about the same as your competitor's, you find the company gradually taking less net profit.
5. Increased costs have resulted from increased accidents and injuries.
6. Taxes continue to take a lion's share of your company's income, and

TABLE II

Problem Number A

Of the 2½c profit on each dollar of sales, how much should be returned to you as a stockholder?

Choices Offered	No. Entrants Checking	% of Entrants Checking
10%	2799	31.2
25%	1837	20.5
None	1750	19.5
50%	1742	19.4
75%	684	7.6
100%	165	1.8
Totals	8977	100.0%
Throw Outs	107*	
Total in Opinionnaire	9084	

* 107 contestants checked more than one choice.

there does not seem to be any chance that they will be reduced. Something must be done to offset this lost income.

7. By increasing the investment in machines and equipment and by adding employees you are able to produce more wheelbarrows at a lower cost. This returns increased earnings to the company. How would you distribute these increased earnings?

Then the contestant was asked to assume the role of a prospective stockholder in the wheelbarrow concern, and answer two problems:

1. Of the 2½ cents profit on each dollar of sales, how much should be returned to you as a stockholder?

2. How much return on each dollar of sales do you believe this company should make before you would consider investing a part of your savings in the company's stock?

A number of interesting facts revealed themselves upon even a preliminary analysis of the tabulated data. In the first place, the contestants rarely checked only one solution. It should also be observed that more than one practical solution was included among the choices offered in many of the questions. Moreover, a majority of the contestants performed satisfactorily in the role of being the boss. This was particularly true where the problem involved basic concepts of productivity, costs, prices, and sales. This is illustrated in Table I which involved a wage problem.

It has often been suggested that labor regards management's ability to pay as infinite. Yet only 0.5 per cent of the 9,000 contestants, many of whom were laborers, checked automatic granting of the wage increase as a "practical solution." On the other hand, 75.4 per cent suggested looking at the cost, investment, and market effect of the wage demand. The public seems to feel that management should lay its cards on the table in wage negotiations as is illustrated by the fact that 63.1 per cent favored telling their employees exactly what their position was at this time. On the other hand, a significant percentage (43.2) ignored the possibility of intra-industry cost differentials in suggesting that the wage rate be equated with the area average. Further, 5.3 per cent suggested that the

TABLE III

Problem B*

How much return on each dollar of sales do you believe this company should make before you would consider investing a part of your savings in the company's stock.

Return Required %	*Number*	*Return Required %*	*Number*	*Return Required %*	*Number*	*Return Required %*	*Number*
0.0	10	6.5	40	19	0	40	100
0.25	10	7.0	250	20	370	41	0
0.38	10	7.40	10	21	0	42	10
0.50	10	7.5	70	22	10	43	0
1.00	70	8.0	280	23	0	44	0
1.25	50	8.5	10	24	0	45	20
1.50	20	9.0	40	25	510	50	180
2.00	280	9.5	0	26	0	55	0
2.25	10	10.0	1650	27	0	60	20
2.30	10	10.5	0	28	0	65	0
2.50	470	11.0	30	29	0	67	10
3.00	350	11.5	0	30	120	70	0
3.50	110	12.0	100	31	0	75	110
3.75	10	12.5	50	32	0	80	20
4.0	480	13.0	50	33	30	85	0
4.5	30	13.5	0	33 1/3	120	90	0
5.0	1210	14.0	10	34	0	95.0	10
5.10	10	14.5	10	35	60	100.0	20
5.50	30	15.0	270	36	10	180.0	10
5.75	10	16.0	40	37	10	Indefinite	420
6.0	660	17	10	38	20		
6.20	10	18	30	39	0		

Cumulative Summary Problem B

Cumulation	*No.*	*%*	*Cumulative Number*	*Cumulative Per Cent*
75% and above	170	2.0	170	2.0
50% and above	210	2.4	380	4.4
25% and above	1010	11.8	1390	16.2
10% and above	2630	30.7	4020	46.9
5% and above	2630	30.7	6650	77.5
Below 5%	1930	22.5	8580	100.0

* Items projected on the basis of 10% sample of 9,000 entries.

Government be invited in at even this stage of the negotiations. Some of the answers to this and other questions seem to indicate that there was a considerable "fringe" element that demonstrated relatively little knowledge of economic principles and processes.

Also, the average contestant demonstrated that he was on firmer ground when dealing with problems of production than when he was dealing with problems of business finance and the concept of profits. This is shown by Tables II and III.

Although these questions could have been considerably improved by inclusion of data on the company's investment structure, almost as many contestants (19.4% as compared to 19.5%) believed that the company should grant no dividends as believed that as much as 50% should be forthcoming on the 2½¢ profit per dollar of sales. Table III amply demonstrates the confusion in this area of business problems. The contestant could offer his own figure for this problem. This figure ranged from 0.0% to 180.0% return on each dollar of sales. The extreme lack of agreement is indicated by the scatter of responses within the range. However, the cumulation indicates that over two-thirds of the contestants indicated that the return should lay between 5% and 25%. There are also definite concentrations at 5.0% and 10.0%, although these may have been familiar figures dredged up from dim recollection.

Finally, space limitations do not permit the use of all the data developed in the questionnaire analysis. Tabular summaries of problems 2 through 7 are omitted but the observations previously made are not affected as a result. A complete summary of all the problems can be made available to those interested.

This brief analysis of a sprinkling of the opinions expressed in "You Be The Boss" clearly demonstrates the value of the study, particularly if it is regarded in its proper framework, that of a pioneer attempt to shed some light in this very difficult area. The sponsors of the contest made no claim to expertness in the construction of the questionnaire used and in the measurement of economic opinion. What they have done, is to dramatize the need for greater understanding of the spirit and functioning of American business enterprise, and to suggest a technique for making the "dismal science" of economics exciting and enjoyable to that mythical character "the average man." END

(The second in a two-article series)

The Management Man's Responsibility To The Public Grows From His Work For His Firm

THE primary task of a production official is to achieve minimum cost per unit of output or, to put the matter in reverse, maximum output from a given quantity of productive resources. The achievement of maximum productive efficiency, which economists take as an assumption in drawing the cost curves for a firm, is a very difficult task. Plant efficiency does not just happen. It is achieved only through skillful and informed administration.

Why should salaried executives be interested in reducing costs when they do not share directly in the resulting profits? There is doubtless some element of professional pride in doing a good job of administration. The main reason, however, is that the level of production costs is the standard by which their performance is judged, and has a direct bearing on their prospects of promotion to higher positions. The executive who consistently beats the budgeted costs for his department is marked down as a "coming man" and can usually expect advancement. That is not to say that all management people are as efficient as they could be, but simply that efficiency is the main test of right action in a production organization.

Behind the pressure on the individual executive to achieve greater efficiency lies the need for survival of the organization in a competitive world. Few businesses are so thoroughly insulated from competition that they can survive indefinitely without progress. The company must usually continue to improve its product and methods of production if it is to remain in existence decade after decade. Most management people take it for granted that their organization should not merely survive but grow over the course of time. Direct economic incentives, the heady feeling of running an expanding concern, institutional loyalty, the sheer sport of besting competitors, all combine to make the executive identify progress with the expansion of his company.

Management pursues efficiency, then, as a means of personal advancement and to survival of the organization. The pursuit of efficiency is also rationalized in broader terms. It is the source of social progress, of a rising national income, of higher wages for employees and lower prices for consumers. The management man thus regards himself as a steward for society in general. He believes that in furthering the interests of his company he is serving the public welfare.

In the modern corporation, pursuit of efficiency requires co-ordination of the efforts of hundreds of thousands of individuals. The business manager is not just an expert in production techniques. He is the leader of an organization, the captain of a team. Successful performance of his functions requires that he have wide latitude in making decisions, and that he have "cooperation" or "teamwork" from those under him. To most management people, teamwork seems to mean mainly fealty—a willing acceptance of managerial decisions and an earnest effort to execute them. It leaves room for tactful and "constructive" criticism of particular decisions, but no room for any challenge to management's right to make these decisions. The ideal situation is one in which the manager functions as a benevolent monarch. No one questions his authority, but his exercise of authority is so just and reasonable that his subordinates esteem rather than fear him. The feeling that one has been fair even when one didn't have to be is probably one of the greatest satisfactions obtainable from a management position.

Bakke has summarized management's conception of its role in the following terms. First, business managers are inventors and initiators. "They start things, figure out new ways, take risks, take the initiative." Second, they are leaders. "They are decision makers, men of perspective, foresight, and balance in a troubled and confused world, the head of the business, the captains of industry, men of standing who are looked to for guidance." Third, they are organizers. "They organize, coordinate, gear together the factors of production. They reconcile the conflicting interests of workers, stockholders, suppliers, and customers." Fourth, they are trustees or stewards—for workers and customers as well as stockholders. They are builders, creators of national wealth, public benefactors. . . . *from Labor Economics and Labor Relations, by Lloyd G. Reynolds.*

Financial Planning and Control: A System Of Levees Against Business Floods

by John E. Kusik, vice-President, Chesapeake & Ohio Railway Company

First, says this author, proper financial control within any company is a matter of a firm financial philosophy, a business way of life. Inventory controls systems, budgetary controls, cost control devices, capital expenditures procedures—none alone can help a business to avoid the inroads of fluctuations that may occur in any field over a period of time. But certain procedures, properly arranged under a definite, thoughtful, over-all plan, can help any business build levees against the ever-present threat of unpredictable business fluctuations. Here the writer tells how it is done, and describes fully the four major approaches which, in his experience, have been known to work

A FINANCIAL control system is like the system of levees on the Mississippi. Both systems serve the purpose of controlling a flood tide and directing it back into the river bed.

Normal business decisions and actions, natural miscalculations, unpredictable economic factors; they all release forces which, like a rampaging river, are very powerful. These forces are so powerful that, in the absence of a strong system of levees, they may engulf your company or ours in the flood of financial disaster.

This truth is not under debate. It is commonly accepted, at least among financial men. However, there appears to be considerable confusion about how to proceed with the construction of adequate systems of financial planning and control. A feeling of being lost seems to surround efforts to create such systems, even though they cover familiar ground. Frequently, full support is lacking on the part of other segments of top management.

Just what do I mean by a "feeling of being lost" or "lack of full support?"

I am sure that many of you have heard the classic story about the small New England manufacturer and the personnel consultant. The consultant received a letter which read as follows:

"Dear Sir:

I am the owner and president of a small textile mill here in New Hampshire which employs about 1100 people. I have been having a terrible time with my labor relations, including demands for higher wages which I can't afford.

I was very much impressed by your article in last month's issue of Advanced Management.

Please send me a personnel program, by return mail, together with your invoice which will be paid promptly.

Very truly yours,

Mr.——"

Many of us would be delighted if a personnel program could be bought by mail order!

The other day I received a letter from the head of a substantial business. He is wondering how to set up a financial planning and control system. This man said:

"I'd like to have my controller set up a control system without bothering my manufacturing or marketing men. You see, they're up to their ears running the business. So will you please send my controller some sample forms you have devised for the Chesapeake and Ohio Railroad."

The obvious parallel is that both the New England president and this man were looking for a magic solution. Neither the personnel consultant nor the financial man can possibly create such magic. But too often the man who laughs at the personnel story does not get the point of the financial story, largely because of failure of financial men themselves to properly define and explain their own important supporting role.

In turn, this disability appears to stem from a lack of a pattern which would draw such efforts of control together into a coordinated and more easily explainable business philosophy. Many of us have in operation inventory control systems, budgetary control systems, cost control devices, capital expenditure procedures and the like. But too often these separate devices are like a pile of sleeves, a pile of lapels and a pile of pockets; until they are properly put together they

do not make a coat. These devices are like individual sandbags. Until they are properly put together they do not make a levee or a system of levees. Until our separate financial control devices are drawn together in a business philosophy, they do not make a successful financial planning and control system.

Perhaps by getting back to our system of levees we can make a start toward clarifying this confusion by seeing whether we can agree upon the main subdivisions of a system of financial planning and control, and how they serve each other.

What we have is a basic river bed of business operations in marketing, production and finance. Naturally, the marketing function must take the lead because without it all other functions would become unemployed.

Normal business decisions and actions, natural miscalculations, unpredictable economic factors, they all release forces which are very powerful. These forces are held in the river bed by a system of four levees.

First: the levee of earning power. Do we know what our companies' targets should be for earning power? What should our normal expectations be?

Second: the levee of money in business. Do we know what our companies' targets should be for total amount of money used is business? How much of it should be held for protection against miscalculations?

Third: the levee of coordinated planning of marketing, production and financial operations. Is the planning of marketing and production operations consistent with our financial, as well as our other objectives? Is our marketing and production planning screened against the company's financial objectives?

Good Planning Must Co-ordinate Finance, Production, Marketing

Planning will not function as a sound levee unless its financial aspects are closely coordinated with marketing and production. The effect upon profits and cash, either of major successful planned activities or serious miscalculations in any of these areas, is so great that maximum free communication must be maintained at all times among them. The financial function can render here a major service in helping to resolve on the basis of economics, the natural conflicts between marketing and production as to such questions as product standardization, production scheduling, and so forth. This levee of coordinated planning will remain sound only so long as cooperation of the highest order exists among all basic functions of management.

Fourth: the levee of an effective mechanism for the control of business activities. Do we have in our business an adequate control mechanism which keeps subsequent decisions and actions consistent with planning? Does it also operate as a sensitive signaling device of new dangers ahead necessitating emergency adjustments in planning and control? Are the financial aspects of the control mechanism properly coordinated with marketing and production controls?

Approach To Control Mechanism Must Be Modernized

Clearly, an appraisal of the effectiveness of the mechanism for the control of business activities, raises some major questions. It opens up the entire subject of methods of measuring past performance or forecasting the future; of adequate reporting to management on all levels and in all functions; and of the application of scientific methods of thinking and measurements. Frankly, in my opinion, our shortcomings as financial men are greatest in this area. Obviously, the levee of mechanism for the control of business activities will not be effective if it must depend entirely on slow-moving accounting measurements.

This, in brief, is the basic pattern of any system of financial control. It is self-evident that all four levees must be sound and closely coordinated in order to obtain an effective system of financial planning and control.

We now return to a closer examination of the earning power and money in business levees and to the manner in which they function. I have selected these two levees because they are most frequently overlooked. Yet their neglect may nullify all other efforts of control.

The earning power levee answers such questions as:

(a) What should our companies' objectives be for earning power, either in terms of return on investment, earnings per share, or some other basis?

(b) What should its dividend rate be?

If you are the financial man of your company, or any other member of its top management, shouldn't you know what the answers are? Do you know? Does anyone in your company know? How are they determined?

Earning power objectives may be established by relating them to the performance of industry leaders. They could be also related to some calculated target or an arbitrary improvement trend determined by our respective managements.

Whichever method we use, it is most important that we anchor our earning power targets to adequate maintenance and modernization policies. If not so anchored, *under* maintenance or *delayed* modernization may seriously overstate our existing earning power position.

I would like to add one thought about targets which are set by arbitrary decision. Responsible management men have emphasized the fact that objectives of any kind have an inherent power within themselves to stimulate action. For example, suppose you set for yourself 9:00 A.M. as the hour for your arrival at the office. This might be an arbitrary objective unrelated to the official starting time. Nevertheless, should you arrive before 9:00 A.M., you would probably feel that you are early, and should you arrive after 9:00 A.M., you would feel that you are late. However, your actions would tend to get you to the office around 9:00 A.M. So when I speak of the inherent power of objectives, arbitrarily determined, I am suggesting that we bear in mind how they affect our mental attitudes and how they affect our actions. In other words, even arbitrary targets may serve very useful business purposes.

Functions Of The Earning Power Levee

To return to our system of levees—how do these earning-power targets serve as a levee, directing the flow of business decisions and actions? One example is the screening of requests for funds for marketing or production expansion. I am sure that each of you recognizes this problem as being a practical one. It is an unusual company whose progressive marketing and production officers cannot and do not present too many candidates for new funds. Not all of them could pass the acid test of adequate profitableness. The development and the use of proper profit targets for weeding out and assigning priorities to these proposals is an essential function of our earning power levee. When properly used, it acts as a wall against an overrushing flood of sterile capital investments without, in the least, discouraging the taking of necessary, calculated risks. In fact, when properly used, the earning power levee may become a strong, creative stimulant for the development of increased earning power of the com-

pany. Is this earning power levee in effective operation in our companies?

The next levee is that of *money in business.* These objectives are answers to such questions as:

(a) What are the limits of total long-term capital that our companies' earning power can carry?

(b) What proportion of long-term capital should be borrowed and what proportion should come from stockholders or withheld from earnings?

(c) What should our companies' working capital level be from the standpoint of requirements for operations or protection against unforeseen contingencies?

Targets outlining the safety and danger zones in this area are again indispensable for keeping business decisions and actions within the sound channel of the river bed. Let us take a quick look at the money-in-business levee in order to see how it operates. Let us consider the question: "What part debt in the capital structure?"

The Role Of Debt In the Capital Structure

The word debt has a horrible sound, bred into us through generations of fear, sound fear of debt! Yet, when we are talking about long-term capital raised, let us say, through the sale of bonds, we are not talking about quite the same kind of debt that grandfather feared. Long-term debt, for our purposes, is merely another form of lower-risk permanent participation in the ownership of a business.

Of course, not all types of business can use it, and not all of them can use it to the same extent. However, since tax rates became very high and inflation set in, more and more businesses have found this form of long-term capital useful. First: because of lower cost (interest on bonds is deductible for tax purposes; dividends on capital stock are not). Second: capital raised through bonds has offered a hedge against inflation for the benefit of stockholders. Third: investors have been expecting disproportionately high return on equity funds anyway.

Why is this subject pertinent? How is this question of borrowing related to the levee which we are now examining—that of objectives for money in business?

Obviously, some flexibility in the attitude of management, at least toward some forms of borrowing, might increase availability of funds. New sources of funds could add to the scope of planning in the marketing and production areas. On the other hand, companies already using a substantial amount of borrowed capital might find it necessary to cut back their marketing and production planning if it appears that continuation of expansion leads to danger zones. Seeds of future embarrassment may be found not only in excessive borrowing, or other forms of overcapitalization, but also in failure to spend money courageously when wisdom of such actions is indicated.

No-Borrowing Policy Can Stunt Company Growth

Failure of any company to find out the full extent of its opportunities of raising funds, including a blind adherence to a no-borrowing policy, can lead to what one serious modern management man has labeled "the psychological barrier to corporate success."

What I am emphasizing is that a levee has a two-fold function. On one hand, it serves as a barrier; on the other hand, it indicates how far marketing or production planning can go. Top management having this knowledge—in this instance, about the financial objectives of the company—may be able to extend the area of reasonable risk taking. Without this knowledge, it may have to hold back merely to play safe. Are these *financial* levees in effective operation in your company?

Now to the question of whether a system of financial planning and control has the same value for all companies.

Consider first the case of construction concerns operating with very low capital under a system of progress payments, common in some industries. Experience shows that in connection with projects undertaken by such concerns, the profit objective plays a very prominent part. It may be said that they are much more conscious of earning power targets, than are companies carrying multiple product lines. Once the construction project is secured, close controls are generally established in order to preserve the profit objective.

Experience proves, however, that during the period of construction, such concerns operate literally under continuous danger of breaking through their levees at any time. In these circumstances, there usually emerges another objective and this one has to do with money in business. The objective which I have in mind is the unavoidable, burning necessity of meeting the payroll. It has been observed that such concerns operate in this manner for long periods of time, casting about with seeming desperation; seeking sources of funds in the form of additional prepayments or price adjustments; seeking extreme marginal bank loans, often guaranteed by personal endorsements of officers; all to the end of keeping with the system of levees.

Thus, we find that relatively small concerns have an acute need for an adequate system of financial control. They, too, need a system of strong levees to keep their business decisions and actions within the sound channel of the river bed.

At this point, the question might well be raised: What about so-called well-heeled companies? Was there ever a company so well-heeled that it could find no value in financial planning and control?

Perhaps we should first weigh, for a moment, the meaning of well-heeled. Presumably, it means that funds would be available for any conceivable purpose without borrowing or issuing additional capital stock.

Let's accept this limited definition of well-heeled. It takes us right back to the levee just discussed, that is, of targets for money in business. If the appraisal of being well-heeled is justified by large sums of capital already on hand, then we might well inquire: What is this capital doing now? Obviously, if it is idle, or if it is invested in securities earing a lower return than that produced by the business itself, then we might go on to find out whether wasteful use is being made of capital. We should bear in mind that in the case of funds withheld from stockholders, no less than in the instance of new capital raised through sale of securities, rigid yardsticks should be applied in screening out its current or prospective utilization.

On the Chesapeake and Ohio we have found that the application of the concept of the four levees has been very constructive in meeting our objectives.

Here some will ask: "Why waste time on all this talk about objectives? Our first objective (earning power) is 'as *much* as possible'; our second (money in business) is 'as *little* as possible'!"

If this be your reaction, I urge you to re-examine critically your entire system of levees. You many find a lot of work going on under the label of financial planning and control; but instead of having the security of a strong system of levees, there may be an isolated series of sandbags. END

Better Production: The Aim of Management's Responsibility to the Employee

by William F. Winders,
Director of Industrial Relations,
Tennessee Eastman Company

Management-employee relationships are probably the most popular subject of modern management discussion and literature since the first movement toward collective bargaining. This author says that human relations' chief aim has been all but forgotten in the welter of words and pages. Production, he declares, is the final aim of all relationships between the actual workman and any level of management. With actual examples he gives various cases which prove the point, and tells what grievance procedures can be used by management to achieve a keener interest in final production by the individual employee

MANAGEMENT'S responsibility to the employee is a subject with which every management man should be concerned. The relationship between employee and employer has a definite effect on the well-being of the nation.

The very fact that the Atlanta Chapter of SAM placed this subject on its program is an indication of the change in management's thinking in comparatively recent years.

When we look backward in time the years seem to be but brief moments. This is particularly true when we consider the time necessary to realize any changed concept in social thinking.

A hundred years ago is not a long time. About then this notice was placed on the bulletin board of a large department store in Chicago:

STORE RULES

Store must be opened from 6:00 a.m. to 9:00 p.m. the year round.

The employee who is in the habit of smoking Spanish cigars, being shaved at the barber's, going to dances and other places of amusement, will surely give his employer reason to be suspicious of his integrity and honesty.

Each employee must pay not less than $5.00 a year to the church and must attend Sunday School regularly.

Men employees are given one evening a week for courting, and two if they go to prayer meeting.

After 14 hours of work in the store, the leisure hours should be spent mostly in reading.

I have no doubt that the owner was one of the progressive thinkers of his day.

It was not until about 1900 that the more forward-looking managers of that day discovered a principle that was really new. It was then that they realized the release of willing effort on the part of an employee is controlled by the individual employee himself. In each of us there is a sort of rheostat that we alone can turn on. And only in an attitude of mutual understanding and mutual respect will we as individuals turn on that energy to its highest degree.

When we talk of management's responsibility to the employee, in order that I might be on familiar ground, I should like to limit my discussion to the employer-employee relationship in industry. However, I believe we will find that the same principles will apply to this relationship in other business activities regardless of the nature of the business or of size. The basic responsibility of management is to recognize, respect, and preserve, the individual dignity of each employee. I believe that generally today management recognizes this responsibility. That appears to be so if we read the various statements of policy principles, and codes that appear in the various employee handbooks. However, I believe there is considerable failure on the part of members of management to make these principles a living reality to the men and women on the job. And that is the real responsibility of management.

It is not difficult to write a code on paper, but it takes real ability and consecrated effort to get it off paper and into the hearts and minds of men.

We know, of course, that without the individual worker nothing could be done. Each job in an industrial plant is essential to the most effective functioning of the whole team. Each person is

important because he performs an essential job. Management should recognize this, and should let the employee know that his importance is recognized and that he is an important player on a winning team.

Needs of Employees Are Basically Alike

First, to work toward good employer-employee relations we must recognize that the basic wants and desires of every human being are the same whether he be office boy or treasurer, floor sweeper or the president of the company. Sometimes when we mention human relations in industry or personnel relations, there are those who envision a weak system of giving in to each whim of an employee. Such a program would be a weak system indeed and would be a weakening disservice to the employee. This, however, is not the true picture.

The basic purpose of all industry is production—either of goods or of service—and a good human relations program in industry is aimed at and results in improving the productive effort of the work force. It is undeniably true that employees who are confident of fair treatment at the hands of their employer are more productive than those filled with distrust, anxiety and fear.

The job of making the human relations program harmonious and effective is a most important responsibility of every member of management. It is especially the responsibility of direct supervision throughout the plant. The real effectiveness of any human relations program in industry is determined in the day-to-day contacts between members of management and the men and women on the job.

There are certain basic principles of behavior on the part of those who deal with people that are conducive to better human relations. If these principles are neglected, the opposite effect results. Perhaps a few cases will serve to illustrate:

One morning a foreman took a group of men out with picks and shovels. Designating a specific spot, he said, "Dig here." The men dug a hole about 4 feet deep, and the foreman looked into it and commanded, "Fill it up!" Indicating another spot a few feet away, the foreman said, "Dig here." When the hole was about 4 feet deep, he looked into it and said, "Fill it up!" A third time he located a spot and said, "Dig here." The men grumblingly complied, only to be told to "Fill it up". A fourth time the foreman ordered, "Dig here", and a worker threw down his shovel and said, "I quit! I'm not going to waste my life away digging holes just to fill 'em up again." At this the foreman said, "Wait a minute. This is very important. You see, a gas main burst somewhere in this vicinity last night and it's our job to find it." Upon being told "why", the work was performed. Each employee is interested in knowing the purpose of his work, how it contributes to the end product or service. A man cannot give his best effort unless he knows the purpose of his work and can experience a feeling of importance in the performance of that work.

Joe was cleaning some machinery where there was a large fly-wheel in operation. Inadvertently Joe backed into the fly-wheel which caught him, lifted him high in the air, and in revolving banged him smartly against the floor. About the third turn the plant superintendent walked in. Seeing Joe going over and over, banged against the floor each time, he was so shocked that he just stood there several seconds before shutting off the machine. The fly-wheel stopped. Joe hung momentarily at the top, then dropped with a thud to the floor. The superintendent ran to poor Joe and bending over him cried, "Joe, speak to me! Speak to me!"

Joe opened his eyes, and fixing the superintendent with a cold stare, said, "Speak to you, hell! I just passed you twelve times and you didn't speak to me."

It is important that we recognize the individual employee. A morning greeting, an occasional inquiry about the family or about some outside interest of the employee will go a long way to relieve tension and create good human relations.

Management Needs To Learn To Listen

Recently Mr. Fred Smith, vice-President of the William Powell Company, told of an employee coming into his office with what the employee considered to be a real grievance. He was a great big fellow and he was mad. He wanted satisfaction and aimed to get it. For about 10 minutes he continued to tell Fred Smith how unjustly he had been treated. When the story was finished, Mr. Smith said, "Now, Jim, I want to be very sure I'm right in this and I want to be sure of the facts. Will you go over that again for me?" So Jim told the story again in detail. Fred Smith said, "I think I follow you up to this point. Will you pick it up from there and give it to me again?" Jim did that. Fred then said, "Now just to make sure that I have it straight, Jim, let me tell it back to you." And he repeated the story almost word for word to Jim. At the end of it Jim said, "You got it right, Fred, and you can just forget it. I see there isn't anything wrong after all."

We need to learn to listen. Let the employee tell his story. Listen sympathetically. If action needs to be taken, get the facts and take action; but more often than not just listening is all that is necessary because most problems when brought into the light lose most of their importance.

Better Human Relations Through Grievance Procedures

A grievance procedure is a very necessary tool for working toward better human relations. No matter how good the plan there will sometimes be misunderstandings. When they occur, the employee must have recourse. There must be some specific steps he can take to present his side of the picture and to have wrongs redressed. The nature of the grievance procedure will probably depend on whether or not a union is involved. The non-union plant frequently has an open-door policy in which the aggrieved employee can take his grievance to anyone in management. Here again the effectiveness of the program depends almost entirely on how it is administered. And the administration of such a program requires real courage and determination. An open-door policy is sometimes referred to as a policy of greasing the squeaking wheel.

There is quite a difference between the effective use of an open-door policy and a policy of greasing the squeaking wheel. Sometimes these policies overlap. If you have ever greased a farm wagon, then gotten in to drive away only to find that one wheel still squeaks you may find that you simply skipped a wheel. Then the obvious answer is to apply the grease.

If, however, you find that you did grease that wheel just as you had the others, then something else is wrong. You know, of course, that this should have immediate attention. Perhaps, there is a burr on the axle—the rod—which should be removed immediately. But maybe there is a nipple in the hub of the wheel. That's a little harder to get to, but may be reached if properly ap-

proached. Sometimes a nut needs tightening or maybe the wheel needs re-bushing, in which event we may have to call in some assistance. But in any case every reasonable effort is made to get that wheel operating well again so the team can go smoothly forward.

Occasionally the repair job just can't be done, and it is necessary to get a new wheel. In this case the old wheel may be effectively used in any of a number of ways; but if no good use can be found for it at all, it is best just to get rid of that wheel completely. It is never good to have useless wheels cluttering up the farm yard.

When John arrived home from the office one evening, Mary, his wife, met him in quite a bad humor. She told him that Martha's husband had just bought Martha a new fur coat and Mary felt that it was high time that John bought her one. John mumbled something about predictions for a mild winter and picked up his favorite book. Anyway he wanted a new jointer for his work shop. Six months later he was met with a new tirade because Lucille's husband had now bought her a fur coat, leaving Mary the only one in her bridge club who didn't have one. Again John made excuses. A few days later Mary met him at the door all dressed in a new fur coat, but she was not smiling. She said she was tired of waiting and that she had told all her girl friends just how she had to go about getting a coat. Now, of course, John paid for the coat and then he began to wonder if it would not have been better if he had gone down and bought the coat and surprised Mary with it. He could picture Mary's pleasure at his surprise for her and could hear her praising him to her friends. As it was, he was paying for the coat, but he wasn't getting any credit for it at all.

Management Must Make Legitimate Grants In Time

Management should take the initiative in being sure that those things which should be granted to employees are granted as soon as it is right to do so and before it is forced to do so. You will note that I said *those things which should be granted*. This is especially applicable to the matter of wages. Money is an important item in any plan toward better employer-employee relationships. There must be a plan that will insure as far as possible that each employee is fairly paid. The most important aspect of such a plan is that jobs within a plant or business at one location shall be fairly paid in relation to each other. It is very seldom that the amount being paid is the cause of any unhappiness, but it is the amount below a rate for some other job which the employee feels is no more important than his own.

Sometimes we hear the expression, "All I want is a living wage," but that is very hard to define. The best definition I have heard recently is that "a living wage is a little more than I'm getting now."

Any good wage plan should provide for increases to be given with improvement in performance on the job and it should be so administered that the employee will feel confident of receiving fair treatment without his having to mention the subject himself. You may be sure that the employee will be loyal to those who represent his interest. The employer should take the initiative in this.

Employees' Sense of Fairness Is Asset To Management

The American worker is an individualist, an optimist; he has pride, he likes to brag, he has a real sense of fairness. This sense of fairness on the part of most people is a strong asset of the employer. If we give the story straight to employees, their sense of fairness and intelligence usually will cause them to make right decisions.

Recently we employed a new technical man who came to us with a very good recommendation from his professors and a good scholastic record. After a few weeks he began making serious errors and was observed to be careless about procedures. It seemed that we had to decide that he was unsatisfactory. Then in an interview we learned that his mother, father and fiancee were in the area of the terrible Kansas flood which occurred a few months ago. His anxiety and preoccupation were quite understandable. Some sympathy and patience brought him around into a good employee.

A good human relations plan is most effective when it enables each employee to reach his goal of self-development and self-fulfillment. In this connection I have not attempted to list the basic needs of man that are so frequently listed. But there are two of these I would like to mention briefly.

I still believe that the first desire of each employee is opportunity. In these days when so much is said about security it may be somewhat of a surprise that I should list opportunity first. But I have by no means lost faith in the American worker. It is from them that we will get the managers and employers of tomorrow. An opportunity is desired, it is true, as a means toward the attainment of the other desires. He wants an opportunity to provide for himself and his family the basic needs including material comforts and as much economic security as he can provide.

Employees Want Opportunity, Then Security

Very important among the needs of every man is a sense of security. We should not be too quick to condemn this desire. It can be, and usually is, a tremendous incentive for productive work. By a needed security I do not mean the guaranteed life which in itself is weakening to individual character, but a man must have confidence in his own ability to the extent that he is sure that through his efforts he will be able to provide for his family their basic economic needs. A real feeling of security can only come to those who earn that security themselves. In a very significant statement Benjamin Fairless, Chairman of the Board, U.S. Steel, recently said:

"We have proved conclusively that true security can never be fashioned out of slavery, injustice, and corruption. It must be founded firmly on the laws of God and dedicated wholly to the dignity of man. In short, if I could sum up in a single sentence the lessons we have learned from the unhappy experience of nations all over the world, the sentence would be this: There is no security without freedom, there is no hope without opportunity, and there is no progress without incentive."

We mentioned earlier that management's responsibility to the employee was to establish and maintain good human relations in all their dealings together.

In this article I have tried to convey the idea that good human relations depend upon the personal contacts between the supervisor and his men. I have necessarily had to leave out many things that are valuable aids toward the improvement of this relationship. Many benefit plans are evidences of the employer's good faith. While in themselves they do not guarantee good human relations in industry, they are valuable aids toward this end. But the basic rule for good employer-employee relations remains one which deals with the recognition of each individual. **END**

What Is The Right Approach To Business Problem Thinking?

by Stephen B. Hodges, assistant Sales Mgr., Dresser Mfg. Division, Bradford, Pa.

In an effort to speed up his work the author, a serious practical executive, broke down his daily routine just as a time-and-motion study breaks down the elements of any plant job. The writer wanted to know just what an executive really did with his time. His own job, obviously, made him the closest study. He felt that if he understood this more clearly, ways could be developed for increasing his output. His work had six basic operations: (1) thinking about business problems, (2) reading reports, incoming communications, and technical data, (3) observing field or office operations, (4) listening to others relate facts, (5) talking or telling facts to others, (6) writing; either dictating or writing memos, letters or reports. The present unique management article tells what he found out

---

SOON after making the operations breakdown it became evident that the operation which possessed the greatest potential, unquestionably, for increasing and improving executive output was the thinking operation—thinking about business problems.

The author became extremely interested in the subject of business-problem thinking, and developed curiosity about the following questions:

Do all business problems have a uniform nature? Is there a sequence of questions which will help solve most business problems? Can business-problem thinking be improved? He wanted to know the answers to these questions because, if, in each case the answer was yes, the answers would also show a way to learn to analyze problems more penetratingly, faster, and more accurately in the day's work. Executive output could be speeded up just like the output of a factory worker is speeded up through time-and-motion studies.

To get started, an analysis sheet was drawn up on which to write down the thoughts that came to mind during, and immediately after, discussion of a problem. The sections on this sheet were:

1. Description of the problem (case history).
2. What makes it a problem?
3. Why must this problem be solved?
4. How did the condition causing this problem originate? Where did the problem start?
5. Into what type does this problem fall?
6. Is there more than one problem?
7. What steps should be followed in the solution?
8. What questions should be asked at each of the following steps?
   - A. Determining the objective.
   - B. Clarifying the objective.
   - C. Classifying the problem.
   - D. Finding out what's wrong.
   - E. Describing the ideal solution.
   - F. Making the plan of work.
   - G. Determining the alternates.
   - H. Lining up the facts about the alternates.
   - I. Judging the alternates, making the decision.
   - J. Selling the decision.

Analysis of business problem thinking, using this method, went on for a period of about 18 months. At the end of that time the author reviewed all his notes and boiled down the thoughts that were significant to him. The principal thoughts that resulted from this analysis of business problems, together with corollary reading during the same period, resulted in a clearly-defined approach to business-problem thinking.

When you say, "He's a good thinker," what do you mean? Do you mean that the thinker is nimble at mental arithmetic, or that he has a good memory, or that he catches on quickly? Generally not. What you really mean is that he can see the problem as a whole, break it into parts, analyze each and come up with a sound solution.

Which Road Will Take You Where You Want To Go?

In business-problem thinking we are in an unfamiliar situation over and over again. The different roads before us are sometimes clear, sometimes not. Sometimes the destination itself is not clear. It's our thinking job to know exactly the point we want to reach and

then uncover all the facts we can about the alternate roads to that place so we can be sure of picking that road which will be sure to get us there.

One of the hardest things to do is avoid taking one of the roads—jumping at a conclusion—without first making sure that it's the right road. Dewey tells us: "the most important factor in the training of good mental habits consists in acquiring the attitude of suspended conclusion, and in mastering the various methods of searching for new materials to corroborate or to refute the first suggestions that occur. To maintain the state of doubt and to carry on a systematic and protracted inquiry are the essentials of thinking."

If you can visualize business thinking as forked-road situations, this term suggests that there is a certain uniformity to all business problems. If there is uniformity, there must be a patterned approach that will help you to select the best road to your destination.

What is a "patterned approach"? This means an approach which proceeds by asking questions which apply to almost every problem. Some of these, as we shall see later, are:

1. Who's involved in this problem?
2. Who's the key man?
3. What's the objective?
4. What shall we do to get more information?
5. What shall we do to influence the key man?

It is important at this point to be confident that you can improve your ability to pick your goal, and then select the right road to that goal.

Applying The Law of Cause And Effect

Earnest Jevons, in his book, *The Essentials of Logic*, puts it this way:

The causes of any event are the circumstances which must have preceded it. These are usually many things, conditions or circumstances necessary for the production of an effect—all must be considered causes or parts of the cause.

Out of this can we uncover a certain similarity in all business problems which will help us diagnose them and then solve them with a patterned approach?

We can if we start thinking of the destination (or end) as the *desired effect*, and the roads to the destination (or courses of action)—as the *causes*.

In a logical approach to any problem, then, we should always start by defining clearly the desired *effect*, and then follow up by considering the different chains of circumstances which could *cause* this effect.

But how do you define the effect, and think of all the causes which could produce this effect? It's easy if you can see another thread of similarity in business problems—namely, that they center around people.

How Human Element Relates To Cause And Effect

But supposing we agree that all business problems are people—how does that help? It helps if we tie this thought to the thought expressed previously that *most business problems involve the law of cause and effect*. For if we think of the effect as *something we want one of the people to do*, the cause becomes the sum of those things the others involved must do to cause this "key man" to act.

But how does all this simplify the solution of most business problems? By making it possible to ask a patterned sequence of questions which will fit almost every situation. It makes it possible for you to ask questions which will bring to mind all of the facts that must be learned before you can determine the objective, think of all the alternate courses of action, and pick the best.

If it's true that the story of most business problems is essentially the same, what is this common plot?

First you're given the problem and you express it to yourself as completely as you can, in simple terms. Then you take a close look around and see who else is involved in the story. It's very important that you keep in mind everyone who has an interest in the outcome or who can provide help.

The big thing then is to pick the key man and figure out exactly what you want him to do (sometimes the key man is a group of the same kind of people). This action you want the key man to take, is the "end-action" or objective.

Now if you think of the end as the key man doing something, it's easy to think of the things you and the others involved must do to influence the key man to act. The question "What shall we do next?" will always come to your mind. The answer nearly always suggests two courses of action which follow one another.

First, What we should do to get more information.

Second, What we should do to influence the key man.

What the boss generally means when he asks for more facts is: Go out and get more information about the key man. Find out *if* he's doing this thing now that we want him to do; find out how he does it now; find out why he should, or should not, do it; find out if it's better for him to do it the way we want him to do it; find out *how we can best influence him to do it our way*.

After getting more information about the key man you come to the next important part, and by this time you will have learned enough about the key man to answer the question "What shall we do to influence him."

Here's where the alternate courses of action come in. Here's where you set up your chains of *causes* to produce the desired *effect*. Once again you must look around you and consider who's best prepared to influence the key man. Sometimes more than one person is required to do the influencing—*but you can nearly always be sure that the alternate courses of action consist of someone doing the influencing*, and they must do it either by personal contact, by telephone or by written correspondence.

Selecting The Best Alternate Course of Action

After determining all the possible alternate courses of action you are then faced with the problem of selecting the best one. By this time the selection problem will be easy because usually the alternates reduce down to only two or three, and the factors which make one "best" (cost, timing, convenience, effectiveness, etc.) are obvious. This part is usually easy; the tough parts are those that go before.

The selection of the best alternate brings the thinking part of the plot to a close. From then on it's one of action where you must execute the course of action you have selected. The story ends when the key man performs the act you set out to influence him to do.

As we have seen, most business problems are very much the same; they arise in trying to answer the familiar, but sometimes disguised question, "what shall we do?" and the thing you must do is to choose the correct course of action for bringing about some future objective.

Most men have trouble in knowing what the objective is. They usually get it mixed up with ways to achieve the real objective. Is there an easy way to think of the objective? If so, it will speed up direct thinking immeasurably.

In a recent magazine article, L. E.

Kreig, Administration Manager of Manufacturing Operations, Ford Motor Company, makes this splendid statement about the first step in any effective job of organization planning.

"Determine the 'end products' of the activity to be organized. The term 'end product' has been chosen simply because it is more specific, more basic than 'functions' or 'objectives.' Too often statements of functions are clouded with information on *how* jobs are to be accomplished or on the procedures to be followed. Statements of objectives, on the other hand, are frequently too lofty and vague to be really useful."

Objectives Should Be Result of Specific Actions

Mr. Kreig's term "end product," is good because it makes the objective specific.

Another way to make the objective specific is to think of other tangibles of business such as the organization chart, the written procedures, the written policies, since each of these were, at some time in the past, somebody's objective.

But a common feature of all of these tangible objectives is that they were created to help people do things. These actions are the real objective; the buildings, the organization chart, the written policies and procedures are only intermediate to the final actions by people.

A better term for an objective is "end action." Better because it fits almost every problem, because it's easy to determine, and because it gives us a good stopping place in our search for an end or objective.

"Stopping place": what do we mean by that? A little while ago we were talking about 'cause and effect." We were thinking of the *end* of a business problem as the *effect*, and a *course of action* as the *cause*.

As an example of a cause and effect situation let's think of a salesman calling on a customer. Before the call he's got his mind made up that the customer is going to be sold—the customer is going to be convinced, say "yes" and sign on the dotted line. The saying "yes" and the "signing on the dotted line" are the "end actions"—they're the desired effect, the end. But before the salesman can influence the customer he's got to prepare for the call. He's got to prepare a visual presentation, he's got to think about the product the customer is using now and why his proposed product is better. The salesman has to remind himself to look and act cheerful. All of these things, this chain of events, make up the *cause* which the salesman hopes will produce the desired *effect*.

But is the customer's signing on the dotted line really the end action, or the effect, for the salesman? Why does he want the customer to sign? So he'll make the sale and get a commission. Why does he want a commission?—so he can buy groceries and clothes for his family. Why does he want groceries and clothes for his family? So he can live happily. A chain of cause and effect, cause and effect. Herbert Simon expresses it this way:

"Each decision involves the selection of a goal, and a behavior relevant to it; this goal may in turn be mediate to a somewhat more distant goal; and so on, until a relatively final aim is reached."

Everything the salesman does is a cause, and at the same time it's an effect. He's caught in a continuous series of causes and effects which all end up with the final effect: he can live and be happy.

Get The Key Man to Take Action

The same chains of cause and effect exist in almost all other business situations, but when you want to pick an objective, you can't go right down to the end of the chain and say, "my objective is to live and be happy." You've got to stop some place and that place to stop which comes to mind most easily, and which helps your other thinking best is, an action you want the key man in the problem to take.

If you don't do this you'll find yourself groping and sweating for an objective (as most business-men do) and then you'll end up by picking an objective which is really not an end at all but something that should be done right away to achieve the real end.

If you don't pick an end action as your objective you will find yourself getting off to false starts. You'll find that you will be digging up information and facts which aren't important to the solution. You'll find yourself working on the wrong people. You'll waste a lot of time, and many times, before you realize it, you will either produce the wrong effect or you won't produce any effect at all. You'll find too that the end should be "human" because it helps you keep your thinking in terms of people. When you get away from people the problem gets hard.

It's a keen business thinker who can immediately distinguish between his causes and his effects, and then put them in proper relationship to each other.

Here's a list of questions which will help you bring out the important parts of the common business problem in a human, patterned approach.

1. What's the problem in simple terms?
2. Who's involved to help and to provide information?
3. Who's the key man?
4. What do you want the key man to do?
5. What further information do you need about the key man?
   A. How does he do "it" now?
   B. Why does he do it that way?
   C. What are the advantages of his doing it "your" way?
   D. Is your way really the best way for him?
6. How can you convince the key man to do it your way?
   A. Who's involved that can help with the influencing?
   B. Will each help?
   C. How can each help?
7. Which plan is best from the standpoint of cost, timing, convenience, effectiveness, etc.?

Notice that this sequence of questions uses the "Who — What — When" approach. It's important to remember that its purpose is only to open up problems, to suggest ideas. It is not a perfect sequence every time, nor does it guarantee that all the answers will flash back at you.

From here it's a matter of executing the plan you have selected. The biggest part of the thinking job is over.

Patterned Approach Is Real Aid To Business Thinking

To return to the three main questions which prompted this study: Do most business problems have a uniform nature? Is there a sequence of questions which will help solve most problems? Can "business problem thinking" be improved?

The answer in each case, is a definite "yes." Most business problems are cause and effect situations centering around people. These problems can be solved more easily by attacking them with a patterned, human approach. Business problem thinking improves when this patterned approach becomes an intuitive process. END

Are You Building Your Business Toward Oblivion?

by Leonard M. Wasserbly,
assistant General Mgr.,
the Flexrock Company

Every businessman wants his business to live on after him. He has many considerations; pride in his own efforts, care of his family and his employees, the feeling that his work has the enduring quality that posterity can value. But few businesses survive their leader, this author states, and tells why. How this can be avoided is the subject of this article. The author tells the factors involved in getting a business ready to pass into other hands, describes who should be consulted and about what, the steps to be taken, what forms of legal procedures best safeguard the business operation when the owner dies, and finally he instructs the businessman as to whom he should confide in, in order to make certain that his plans do not go awry

---

YOU ARE that great mystery man of our economic scene, the "average" American business man. Vast quantities of statistics have been published about you, and you have been praised and damned in literally thousands of books, magazines, and pamphlets across a span of many years. You have never thought of yourself as "average" and, as a matter of fact, you have always considered yourself a proud individualist. Business to you has always been a wonderful adventure, a game to be played hard, but to be played according to the rules. The score of the game is kept in terms of authority, power, position and wealth. However, as impressive as these symbols of achievement are, you have not considered deeply enough the most significant feature of your life's work, which is simply your effort in creating an economic unit, large or small, whose purpose is to serve the community. Since your business and its employees is the real measure of your success, you should be bending every effort to insure that it continues to grow and prosper regardless of your personal fate.

But it is appalling to note the great number of otherwise sensible and hard-headed businessmen who are methodically and painstakingly building their businesses toward inevitable disaster and oblivion. These business men would undoubtedly be shocked to be told this. It is true nevertheless. By failing to plan properly for the succession of the management function and the safeguarding of financial resources of his company in the event of his death, the average American businessman risks having the creative efforts of a lifetime wiped out almost overnight.

Few Small Businesses Survive Death Of Top Executive

Records show that comparatively few small and medium-sized businesses survive the death of the principal owner and manager, and the worst of it is that the bigger you built your business, the more certain is its destruction after your demise—this because of vastly higher taxes, more intricate legal problems and the higher skill required in managing a larger enterprise.

Why does the average businessman fail to make detailed plans for the conduct of his business after his death? Well, the experts and the businessmen themselves have given many answers, but we suspect that the chief reasons are: confusion resulting from a highly complex tax structure, an unwillingness to face and accept the facts of life and death, and old-fashioned laziness.

What can be done about the situation? There is a plan, and it has worked. Business succession planning is the phrase which describes a philosophical approach to the problem of making preparations for business events that will happen after you have shuffled off this mortal coil. The basic rules of business succession planning are remarkably simple. Answer the following questions and you have your basic plan for Business Succession:

1. What do you want to do with your business?
2. Whom do you want to do it?
3. When do you want your plan to take affect?

The answers to these questions require no legal training or other specialized knowledge. Do you want your business liquidated or do you wish it continued? Is the nature of your business such that it is at all possible to con-

tinue it after you are gone? If yours is a service business, such as a sales agency, engineering firm or professional practice, you are the business and without you there is no business. In such a case, even if there are as many as fifty supporting employees, it's still a one man show. If you want the business wound up, you won't want to go overboard on the purchase of expensive assets that have to be depreciated over a long period of time and are not easily saleable. On the other hand if you're counting on the continuance of your business, you'll want to train a first rate manager or team of managers to take over where you leave off.

What are your current business plans, your hopes, the pitfalls you are guarding against? All these things you know better than any other man. They will provide you with all the answers you will need to set up your business succession plan. You don't have to be a lawyer or a trust officer to work out your basic plan. It is only in the application of the legal tools to bring life to the plan that you should have help. In this area expert help is a vital necessity. Your most carefully-laid plans can be frustrated and your purpose destroyed unless a specialist helps to guide your plan over the treacherous shoals.

Three Principle Threats To Business Succession

There are three basic threats to business succession plans:

1. Shrinkage
2. Legal Tangles
3. Mismanagement

Shrinkage is a very mild word indeed to describe the violence and speed with which the value of your business and estate can decrease in the event of your death. The so-called shrinkage arises from estate and other taxes, the cost of administering your estate, and the reduction in value due to forced sale of your assets. The authoritative Journal for Banking & Trusts reports a typical case of a businessman whose estate was valued at $1,000,000. The assets are listed below:

Interest in close corporation (hard to liquidate)	$400,000
Suburban home	100,000
Summer home	150,000
Business Real Estate	100,000
Miscellaneous securities	50,000
Cash	50,000
Life Insurance	100,000
Personal Property	50,000

On this businessman's estate the federal estate tax was $335,000, the cost of administering the estate $50,000, and the state inheritance tax $57,000; a total of $442,000 in death taxes and expenses. And this was not the end of it. There was probably an additional loss of $200,000 or more resulting from the forced sale of assets in order to pay the taxes and expenses.

Shrinkage Affects Large, Small Businesses As Well

Don't think you are safe just because your estate does not run to 100 or 200 thousands or more. The law may require rapid liquidation of your business interests unless your will specifies otherwise. Also there are state inheritance taxes which start with estates valued as low as $5,000. Other expenses, including the usual parade of lawyers, accountants, appraisers, brokers, and executors, will eat up sizable chunks of your estate. Inflation has probably doubled the value of your home and your other personal possessions. Don't forget this last fact when making up a list of taxable property in your estate, because it is practically certain that Uncle Sam won't. He'll drag out property skeletons from your financial closet like that patent or invention you forgot or that insurance policy you did not know was taxable. Anything that is currently producing income or is expected to do so in the future is suspect for tax purposes.

Another thing that is little understood by the tax victim is that the tax collector doesn't stop with the book value of your estate. Those future earnings of your business which are so doubtful, after you have gone, can be taxed too. And though he may be your richest relative, Uncle Sam can cut a mean and determined swath through your already weakened estate. The watchwords of business succession planning should be: *keep liquid*. A frozen estate won't benefit anybody except the tax collector.

Orderly Succession Must Be Established In Law

If shrinkage is not sufficient to destroy your business, legal red tape can paralyze it. The legal tangles which can occur when business succession planning has been incomplete or there has been no planning at all would be downright laughable if the results were not so frequently tragic. How often, when the planner has not made his purposes and desires clear, by a will or other legal instrument, is there such uncertainty that expensive trips into the courts are required to clarify issues? And even worse, how many bitter fights have occured between business associates or members of the family over some minor detail that could have been settled by just a little foresight. In one case the fighting among members of a family went on through the disposition of business interests, property interests, and personal effects until a big, unaesthetic looking statuette of a black cat remained the only point of contention. Seated around the desk of the executor of the estate the argument waxed hot and heavy as the rights to the practically valueless trinket were argued. Finally the weary executor swung around in his chair and his elbow knocked the statuette to the floor where it lay a heap of shattered plaster. The fighting over the piece ceased and the relatives all left each satisfied that none of the others would have even the slightest advantage over himself. The action of the executor may or may not have been accidental but it certainly points up the necessity for making your plan as detailed as possible to avoid any possible misunderstandings. And don't delay in making a will if you haven't done so already, unless you want to risk having your business smothered and strangled by legal red tape at least as affectively as through shrinkage or poor management.

Don't count on the mind-reading ability of your business associates, heirs and lawyers. Tell what you want done with your estate in a will, and, after you make it, tell where the document is.

Choose Successor Early, Train Him Well

Perhaps the hardest pill of all for the businessman to swallow is the utter necessity for training someone to replace himself. The strong hand has been at the helm for many years, enjoying the lonely, yet invigorating, decision-making position. The gradual turning over of his decision-making managerial responsibilities to another causes a wrench in his mental orientation that is hard to take. Yet it is far better to have management responsibilities turned over slowly through a period of years while the businessman is there to guide and advise his successor, than to trust to luck that an untried and untested management can successfully take over the reins of the business during a period which at best will be a trying one.

Look around your company to find out if good management talent exists.

And it's a good idea to consider the lower echelon of employees as well as your top executives. In one retail establishment, the four department heads were called upon to manage the company after the sudden death of the owner. The men were not competent to perform this assignment and the company was practically wrecked before a competent manager was found. His talents had been overlooked because he was merely a stock clerk for the company. The fact that the man had previously owned his own store and had failed in business only because of a lack of working capital was not brought to light until almost irretrievable damage had been done to the enterprise. The businessman-stock-clerk-turned-businessman not only was successful in halting the downward trend of the business, but his efforts have resulted in considerable expansion of the company's activities. In the selection of a future manager, the problem of compensation is a basic one and should be faced squarely. The future manager has a terrific responsibility and his compensation should reflect this and also provide the incentives for maximum performance on his part. A share of the profits or even an interest in the business itself should be seriously considered in providing these incentives.

There are dividends other than the achievement of a good plan for business succession to be had in the training of future management. Taking some of the work load and pressure off the head of the business is good insurance for both business and executive and can significantly increase the length of time during which the latter can contribute his valuable services to the enterprise.

Some Legal Tools Which Facilitate Succession

Once the significance of the three threats to business succession-shrinkage, legal tangles and mismanagement is understood, we can proceed to examine the legal tools with which business succession plans can be brought to life. The most important tools are:

1. Gifts
2. Trusts
3. Insurance
4. Wills.

Of course gifts, insurance, and wills are well known tools to most businessmen. However, in order to achieve the maximum benefits from these tools either singly or in combination it is invariably wise to consult an estate-planning specialist. The labyrinth of the law is exceedingly complex and it is easy to go wrong taxwise, even on so simple a matter as a gift to your son. The trust is an estate-planning tool that is not as well known as the others, though it is the greatest single instrument of protection that is available to you in drawing your will. You can protect relatives, friends, or employees by creating trusts for their lives from which they will receive income and at the same time preserve the principal for a later gift to another person or persons.

A trust is probably the best device for preserving a business intact without the possibility of individuals pulling it apart, since the control and management of the business are kept together under the direction of the trustee. The many other benefits of a trust make it a device that deserves the most careful study on the part of anyone making a business succession plan.

We have here discussed briefly the advantages, the pitfalls, and the tools of business succession planning. However, more than anything else, business succession planning is a state of mind, a philosophy. Because it requires a man to look beyond his life, he is lifted to a higher plane of thought and activity, and since business succession planning is always total planning, you are much more likely to see the whole forest when making business decisions rather than find yourself involved with individual trees.

The choice is yours. As Mr. American Businessman you can continue to struggle and fight toward greater authority, power, position, wealth for yourself, and oblivion for your business, or you can remember and act on the declaration of Benjamin Franklin: "Taxes are indeed very heavy . . . we are taxed twice as much by our idleness, three times as much by our pride, and four times as much by our folly." **END**

NEW HANDS FOR 'THE SCEPTRE OF MANAGEMENT'

Preparation for replacing the top executive is an important and difficult task even in the largest firm, but size gives advantages which smaller companies do not have in dealing with the problem. Typically, in the large concerns the selection of a manager need not be unduly hurried, for the organization is large enough and strong enough to supply at least temporary management to run the business for a considerable length of time. Choice need not be limited, for the large concern has many subordinate executives from whom a manager may be selected; if none of these is suitable, there is usually money enough to attract a leader from outside. The large company usually does not have to face a management crisis and a financial-ownership crisis at the same time. Finally, the large business can get advice in choosing its leader, either from its board of directors or from outside counsel.

In contrast to this, succession is complicated for the small concern because most of its management resources are centered in one man; its operating organization is typically thin and heavily dependent on the general manager for day-to-day guidance, and there is usually no effective source of outside help.

Though popular attention has recently been given to small business problems, it has mainly been directed toward such areas as taxation, share of defense production and controlled materials, relief from governmental restrictions, and protection from "Big Business." The difficulty of providing for continuity of management in the small company is a problem which has received scant recognition. Yet bank and trust officers interviewed in the course of this study estimated that from 70 to 90 per cent of the companies with which they were familiar had failed to look ahead and prepare for the transition from current to next-generation management. . . .

Mr. William A. Lyon, banking superintendent of the State of New York, has indicated the importance of the problem to the banking profession. ". . . increasingly the smaller banks were permitting their separate identities to disappear 'through failure to come up with new hands to which the sceptre of management can pass.' " . . . *from Management Succession in Small and Growing Enterprises, by C. Roland Christensen*

Authors In This Issue . . .

ANDREW M. KENNEDY, JR., author of the article on a special approach to purchasing (page 5), has spent almost his complete management career in the purchasing field for a single firm. He was buyer at the Westinghouse Company's Lima, Ohio, works, then assistant Purchasing Agent at that company's Newark works, then Purchasing Agent there. From this position he went as Purchasing Agent to the Sharon works, then was Manager of Purchases, Stores Division. He became Director of Steel Purchases in the Pittsburgh Headquarters of Westinghouse in 1951, previous to his present position in the firm.

S. WYMAN ROLPH is the President of the Electric Storage Battery Company of Philadelphia, a position he has held since 1950. Mr. Rolph joined the Willard Storage Battery Company (a division of the firm he now heads) in 1916 as Los Angeles District Sales Representative, moving in 1918 to Cleveland as Automotive Replacement Sales Manager. In 1940 he became vice-President and Director of Willard. Mr. Rolph serves the Philadelphia community in several banking positions, has made report simplification (see page 9) a personal project.

ROBERT H. LAWS, labor economics authority, was head of the Department of Economics at Birmingham's Howard College, Associate Professor of Labor Relations at the University of Tennessee, and Instructor in Economics at the University of Texas, and now Director of Economic Programs at SAM. His appraisal of the Milwaukee SAM Chapter's "You Be The Boss" Contest (page 12) was written with

CHARLES J. TOBIN, Director of the Bureau of Business and Economic Research at Marquette University. He has worked in shipping, time study, and expediting production in industry, and has been a teacher and principal of elementary schools as well as a college professor.

JOHN E. KUSIK, who makes a stimulating contribution to management literature with his article on financial controls (page 16), is vice-President in charge of Finance of the Chesapeake and Ohio Railway Company. He has a wide range of experience as a comptroller, having at one time or another during his career been associated with the General Electric Company, having travelled for them to Brazil, Argentina, China, Japan, and Australia. As Assistant to the President of the New England Public Service Company and as Executive vice-President of Rex Cole, Incorporated of New York, he has been close to the financial area of business.

WILLIAM F. WINDERS is Director of Industrial Relations for the Tennessee Eastman Company, has been with that organization since joining it in 1935 as supervisor of the Payroll Department. Mr. Winders' professional career began in 1929, when he was assistant cashier for Wilson and Company. This was followed by a four-year association with the AB&C Railroad, and by several positions with Tennessee Eastman in the Priorities and Wage Standards Departments, where he developed the idea of the means to better production which he explains in this issue (page 19). Mr. Winders is a past president of Rotary.

STEPHEN B. HODGES, whose article about an executive who approached his own job with a time-and-motion study attitude (page 22) gives a new warmth to that technical area of management, has had a full background of executive experience. He has worked in investment banking, both clerical work and outside sales; has been a staff assistant to the vice-President of Operations of Transworld Airlines, Overseas Division; has been staff assistant to the vice-President in Underwriting, the Equitable Life Assurance Society in New York City.

LEONARD M. WASSERBLY is an accounting and business science graduate of Temple University, and took post graduate work at NYU. He has served as the United States Military Representative to the Belgian Congo, as Budget and Fiscal Officer for the Air Force in charge of Middle East Affairs, and is at present maintaining three demanding positions all associated with his management field: General Manager of Semimetals Company of America, Assistant General Manager of the Flexrock Company, and Director of the accounting firm of Wasserbly and Rodin.

New Products . . .

The American Hydromath Corporation has developed a new aid to industrial quality control—the "QualiCount"—a **production counter** which tells at a glance whether any process is in or out of "control". . . .

The Summira Adding Machine Company, Chicago, announces a **low cost adding machine** ($39.50) which performs functions of more costly units, features direct subtraction. The result appears on a total result dial after one operation, has durable clearing bar which eliminates crank action. . . .

A new **stapling machine** which is *fed into*, rather than *worked*, has been developed by the Staplex Company, Brooklyn. Staples are driven as fast as work is fed into the machine. . . .

More than 5,200 checks an hour can be signed by the new **Protectograph check signer** introduced by the Todd Company of Rochester, N. Y. The secret: a new feed process which makes the check signing operation completely automatic. . . .

A light weight, easy-to-apply, **molded pipe-fitting insulation** has been produced by the Owens-Corning Fiberglas Corporation. It provides attractive appearance, has long life, may be used on pipes ranging from low temperatures to 450 degrees Fahrenheit. . . .

A **new safety device** called AURA Soft Plastic Ear Protectors has been announced by Oral Art Earmold Laboratory. They provide not only protection but comfort, are made of non-toxic, inert material. . . .

Beltone Hearing Aid Company launched a **program to test worker's hearing** in January. The purpose: to determine the extent and nature of hearing loss among production workers. . . .

A **clear plastic,** Homalite CR-39, was recently developed from thermosetting resins by The Homalite Corporation. Resistant to scratches and abrasions, it offers high optical and mechanical properties not generally available in the market today. . . .

The Yale Magnetic Cam-O-Tactor, a new magnetic contactor-type **time delay speed controller** for all makes and models of electric industrial trucks has been developed by the Yale Materials Handling Division. It provides uniform contact action regardless of the operator's rate of speed with the pedal.

AM Economics Review . . .

What Makes For Good Labor Relations?

In 1947 the National Planning Association launched an interesting and ambitious project dedicated to an inquiry into those factors making for good labor relations or, as the Association put it, "the causes of industrial peace under collective bargaining." In December 1953 the results of the six-year study were summed up in a final report titled "Fundamentals of Labor Peace." Readers of ADVANCED MANAGEMENT concerned with the problems of labor economics and labor relations will no doubt be interested in a brief statement of the principal findings.

A study of good or successful labor relations is, however, no easy task. The terms are without any clear-cut meaning and there are no adequate standards for measuring the comparative success of labor relations from one firm or industry to another. Nevertheless, a number of standards have been suggested, including (1) the absence of strike actions, (2) the absence of resort to government as a means of dispute settlement, (3) the number of grievances and arbitration cases, (4) the attitudes of the parties toward one another, (5) the efficiency of plant operations, and (6) the "participation" of the parties in determining labor policy.

Task of Measurement

None of these criteria will serve adequately to measure good labor relations. The mere absence of strikes is no assurance of labor peace. A strike may, in fact, clear the air and place the labor-management relationship on a more solid footing. Too, the number of grievances may be influenced by a wide variety of factors which make comparisons from one plant to another almost meaningless. Even if the attitudes of the parties could be measured they would be inadequate as a standard of judgment.

How, then, did the National Planning Association go about the task of determining the causes of good labor relations? Recognizing that no single criterion was adequate, the Association adopted a case-by-case approach which would yield a composite picture of the many factors entering into successful union-management relations. As a result, the findings represent an essentially subjective evaluation of the experiences in fourteen cases studied during the 1947-1953 period. The case reports were prepared independently by some of our most outstanding labor economists, but nevertheless reveal the same basic pattern of successful relationships.

The fourteen cases were selected with considerable care. In all of the companies the history of collective bargaining had been characterized by the absence of industrial warfare; all geographic areas of the United States were included; all of the companies were in reasonably competitive industries important to the nation's over-all economic health; and in no case was a company with less than 1,000 employees included.

Causes of Peace

A study of the results of these case investigations will reveal a persistence of the following factors as contributing to good labor relations:

• *Favorable beginnings.* The absence of a period of open hostility and bitterness in the beginning of the relationship appears to set a pattern that persists.

• *Acceptance of the union.* Most of the companies genuinely accepted the unions as being here to stay and tried to get along with them. In addition, management followed a policy of sharing information with the union and, in fact, using the union as a channel of employee communication.

• *Mutual trust.* The cases were characterized by confidence in the honesty and good faith of the opposite party. A tendency to compromise in reaching solutions was emphasized.

• *Problem-solving approach.* In all cases management was pragmatic in its approach to labor problems. The qualities of open-mindedness and flexibility appear again and again as contributing to successful relationships, and there is a notable lack of the legalistic approach to problem-solving.

• *The absence of serious ideological conflict.* In no case was the union "pro-communist" in leadership or ideology. Union acceptance of the basic institutions of a "free enterprise" economy appears to be basic in the cases studied.

• *Ability to understand the problems, needs, and objectives of the other party.* The cases emphasize the need for union understanding of the fact that management does not operate the enterprise exclusively in the interests of the workers, but also has obligations to stockholders, suppliers, customers, and others. In return, management must demonstrate ability to understand the internal structure of the union, and its political character in particular.

• *Considerable local self-rule.* It is interesting that all of the studies of successful labor relations point up the need for considerable latitude at the local level. The parties must be flexible enough to meet problems as they arise. Highly inflexible industry-wide or area-wide agreements do not appear to be conducive to "good" relations.

• *Absence of "pattern-setting" relationships.* Most of the companies involved in the case studies were pattern-followers rather than pattern-setters, and this fact contributed to improved labor relations. Obviously, the role of the pattern-setter is potentially more hazardous to labor peace than the role of the follower.

• *Favorable economic circumstances.* The size of the plant, nature of the production pattern, rate of technological change, skill levels of jobs, and a variety of market factors are of great importance in promoting favorable relations. Some frequently favorable economic factors include: (a) steady rather than intermittent pattern of production; (b) medium-sized company rather than an industrial giant; (c) skilled and responsible jobs; (d) steady rather than severe rate of technological change in the industry; and (e) expanding markets with relatively inelastic product demand.

• *Community factors.* Frequently favorable factors in the community environment include: (a) a stable work force; (b) a many-industry area rather than a one-industry town; and (c) a low-wage community and high-wage industry.

• *Use of line executives in handling labor relations.* The importance of having operating executives in charge of industrial relations is revealed in all of the cases studied.

While there is certainly no magic formula involved in achieving successful relationships, a knowledge of the experience of others is both revealing and rewarding in the pursuit of constructive collective bargaining.

—ROBERT H. LAWS

New Management Writing . . .

Personnel Management, *by Scott, Clothier, and Spriegel. New Fourth Edition, 648 pages. McGraw-Hill Book Company, Inc., New York. $3.50.*

Anyone who knows this book in its other editions knows its value. It gives a complete coverage of the principles, practices, and points of view involved in one of management's most diffuse and various problems. It covers completely the wide area of personnel operations: the background and development of the personnel function, the tools and records, uses of psychology, education and training, employee incentives, various special problems, and employee representation and social controls. This edition has five appendixes of great value dealing with administration and actual testing of personnel.

The book is a classic of its kind. This particular edition seems somehow easier to read than its predecessors. A fine text on the subject, and an addition to a serious management library.

Psychology Of Industrial Relations, *by C. H. Lawshe. 350 pages. McGraw-Hill Book Company, Inc., New York. $5.50.*

The title here is forbidding, but the book is exactly what the title says. The volume is directed at industrial people in supervisory and managerial ranks who want a knowledge of what psychology can do to help industrial relations. It is not a technically-written treatise, nor a study. It is written in clear, plain language, evidently conceived with great care so that the technical facts shall be clearly presented in non-technical terms. The book is a fine contribution to the type of management literature that is urgently needed by the whole management field.

Textbook of Salesmanship, *by Russel and Beach. 589 pages. McGraw-Hill Book Company, Inc., New York. $4.50.*

This is McGraw-Hill's fourth edition of what may well in time become a famous book of its kind. It is primarily a text, but because of the thorough investigations that went into its preparation and the thoughtful approach of its authors, it would well repay the time of any salesman, indeed management man, who can make the time to read it. Particularly good for the younger salesman, or for the businessman of another country who needs to know the practices that dominate American salesmanship.

Giant Brains, Or Machines That Think, *by Edmund C. Berkley. 270 pages. John Wiley & Sons, 440 Fourth Avenue, New York. $4.00.*

Giant Brains have been built only since 1940, but they will likely bring about the second Industrial Revolution. Every wide-awake businessman should know something factual about them.

This book is easily, informally written, covers the subject thoroughly. It tells how the computers are similar to human brains, then tells what functions they cannot perform, what they are being used for now, what developments can be expected.

Giant Brains has a special value for the busy executive. It is set up so that the chapters can be read alone, each one giving a complete picture of some important area the computer affects. Together, the chapters make the whole story. A highly valuable book.

How To Be a Successful Leader, *by Auren Uris. 239 pages. McGraw-Hill. New York. $3.50.*

Every management man wants to be a successful leader. It is not only important to his own success, but to that of his business or company.

In *How To Be A Successful Leader*, by Auren Uris, the various problems of leadership in business are given in such a way as to produce a systematic, practical method for leadership achievement.

The vital key to leadership lies in three basic techniques: autocratic, democratic, and free-rein. Every successful leader uses one or a combination of these methods, says Mr. Uris, but the question is when to use which method. All three methods are thoroughly analyzed here, and the author shows you how to tailor each to the needs of your personality and to the specific problems of your own business.

Successful leadership depends chiefly, in broad, says the author, on how much the leader understands himself, his particular work-group, and the over-all goals of his business.

The book gives case histories and personal stories of various leaders and how they have used the three techniques and in what situations each or a combination of two or more has proved useful.

How To Be A Successful Leader is an extremely readable, informative book, and can be of definite, direct value to any management man thoughtful enough to give candid, objective study to how he can best use his own personality traits to make for success in the business field.

How To Attract And Hold Engineering Talent, *by the Professional Engineers Conference for Industry. Mimeographed, some 100 pages. $2.00.*

This report is the result of the third of a series of Executive Research surveys done by this society. It reflects the experience of more than 200 companies which employ engineers and the attitudes of 1,400 individuals who are engineers employed in industry. The report covers engineering talent and the problems of firms which employ it, from the raw material point through recruiting techniques, the professional as an employee, benefits and incentives, unions, finally to recommendations. Added are four appendices of further reading presenting both the engineers' and executives' survey questions.

Statistical Methods in Experimentation: An Introduction, *by Oliver L. Lacey. 249 pages. MacMillan. New York. $4.50.*

Statistical Methods in Experimentation, by Oliver L. Lacey, Professor of Psychology at the University of Alabama, is a learned introduction for the beginner who wants to know how to answer a given question by means of actual experimentation. In theory as well as in actual business operations,

any management man as well as the student (the businessman of the future) should find this volume of value.

The contents cover thoroughly the various areas of statistical experimentation: the aim and problems of statistics in experimentation; experimental design; its interpretation; two chapters on probability; three on divisions of the distribution problem; tests of significance of means and differences between means; a chapter on enumeration data; correlation; regression; fiducial limits, and a final and more advanced chapter on experimental design.
management, as well as those executives
Quite candidly a beginner's guide, the book has definite worth for students of who feel the need for better understanding of the statistical methods area.

CONSTRUCTIVE USES OF ATOMIC ENERGY; *various authors; edited by S. C. Rothmann. 258 pages. Harper and Brothers, New York. $3.00.*

Everyone feels the dreadful potential of atomic energy; few know to what constructive uses it can be put. The fact is that it may easily develop to the point where it is a dominant factor in many business changes. Management men might profitably spend the time to read this short, pungent book. It deals with the potential of atomic energy to industry and business in various fields: power, chemistry, metallurgy, aviation, ceramics, soil-fertilizer research, biology, medicine, pharmaceutical research. Peripheral for the businessman now, but perhaps of front-rank interest in less than ten years.

THE PERSONNEL ADMINISTRATOR AT THE CROSSROADS, *published by the American Management Association, 330 W. 42 Street, New York. 54 pages, paper-bound. $1.25.*

This is an interesting booklet on the various phases of meeting today's challenges in the field of personnel management. This is a broad management subject, but this small volume contains articles by practical executives as well as studious research men. Some of the chapter titles: *Application and Administration of Industrial Psychiatry. Training Now For the Plant of the Future, The Rationale of Labor's Demands,* and *Management Reviews Its Position.* Some authors: JOHN POST, manager, Industrial Relations Department, Continental Oil Company; CLAUDE V. SWANK, vice-President in Charge of Manufacturing, Johnson & Johnson; FREDERICK W. DERSHIMER, M.D., Director of Psychiatry, Medical Division, E. I. du Pont de Nemours and Company; CHESTER C. PAYNE, Director of Supervisory Training and Economic Education, Dow Chemical Company.

ECONOMICS AND TECHNIQUES OF MOTION AND TIME STUDY, *by J. P. Lesperance. 270 pages. Wm. C. Brown Company, Dubuque, Iowa. $4.25.*

This book on a highly technical part of the management field relates the time-and-motion study area to the broader economic factors that make up today's business. Outstanding features of this particular volume are studies of (1) the significance and purpose of business ratios and the break-even point, (2) the mechanics or techniques of motion and time study, (3) the importance of the human element in motion economy in terms of individual motivations of the worker, and (4) case problems and illustrations in the field of motion and time study. The book is primarily a textbook; its value to the executive is a serious presentation of the relationship between one of the important research areas and practical business procedures.

MANAGEMENT OF NEW ENTERPRISES, *by Lynn L. Bollinger and John S. Day. 485 pages. Richard D. Irwin, Incorporated, Homewood, Illinois. $7.35.*

Many a management man wanting to start a business wishes he had some objective facts. Here is a book full of them. It tells how to set up business with a new product, with an existing one, and it tells actual cases of firms which have done it. This is the first two Parts of the book. Part Three investigates the acquisition and development of established companies, and Part Four deals with that all-important area, new enterprise financing. Part Five tells of the development of the new and growing organization. An index of actual cases follows this final section.

At first glance the book seems an academic study; it is not. It is a good, thorough, completely-delineated picture of what a business can do, and expect, when he begins a new business. In these times, with a premium on initiative and with new enterprises beset with many special problems; *Management Of New Enterprises* is almost a must.

Ad Review . . .

Advance Statistics on SAM Advertising Questionnaire

On January 4th a questionnaire was mailed to all senior members of The Society.

As this report is written, January 27th, over 1400 returned questionnaires have been carefully read and tabulated.

During November and December, 1953, this reporter interviewed 17 top officials of five advertising agencies. The smallest did a gross business of $2½ million in 1953, the largest over $60 million.

Five officials of concerns who might use ADVANCED MANAGEMENT were also interviewed. Two are members of SAM.

Each of the 17 advertising agency officials were asked this question: "Do you object to placing advertising for your clients in publications sent to members of an association?"

None objected, but all made this stipulation: "If your magazine is on a par, or editorially better, than other business papers, and you can give us proof that the members of your Society have the authority to buy supplies, new materials and services, we will, naturally, seriously consider the use of your publication. Your rates for space and your total circulation are secondary considerations."

From the 1400 questionnaires that have been tabulated to date, we now know that 94.3 per cent of the Society's members who answered the questionnaire, have primary or recommending influence on the purchase of supplies, new equipment, or services. We also know that each copy of ADVANCED MANAGEMENT has slightly better than three readers per copy. Over 6,500,000 men and women are employed in the plants from which the questionnaires originated.

ADVANCED MANAGEMENT offers many manufacturers, publishers and service organizations a concentrated group of buyers. Its 58 Senior Chapters, with over 6,500 members, are interested in factual advertising.

A request: If you have not yet sent us the questionnaire you received, please fill it out and mail it as soon as convenient.

A final summary of the Advertising Questionnaire will be released in an early issue of AM.

—FRANK E. FEHLMAN

CIPM Reports . . .

Advanced Management In France

Although the drive for increased productivity and better management organization does not seem to have been as successful in France as in certain other foreign countries, the present enthusiasm for management training programs there augurs well for its economic future. The ultimate effectiveness of selling scientific management abroad is dependent upon the degree to which the underlying reasons and psychological climate of advanced management thought can be communicated to and accepted by reluctant foreign managers. To show them blueprints of successful American management organization is not enough.

Young Managers Receptive

The hope for gaining acceptance of scientific management techniques lies in a successful educational effort which combines communicating the spirit of progressive management with the best management techniques and innovations. Management training programs within the French business community offer the most practical and dependable combination of these factors. Moreover, these programs can probably be most successful when they are directed to the younger echelon of foreign management who are frequently more receptive than the elder executives now at the helm. The younger executives of today will soon replace the old generation, steeped as it often is in a tradition of "business by arrangement."

There is justified optimism when we see a large part of the younger businessmen in France rallying to participate in the many management training programs springing up all over the country. They recognize in this technique a useful and practical device for transplanting the theory and practices of advanced management to the French business scene. By using French nationals as teachers and trainers and by confining the implementation of the programs within the limits of French business experience, the programs find more sympathetic participants than would be the case if advanced management ideas were passed on by outsiders less familiar with conditions and problems indigenous to the French economy.

Impressed with the success of management education in America, Wallace Clark Medal Winner Rolph Nordling and eleven French industrial experts came to the United States in February-March, 1951, to study this country's industrial training methods and the effect of such training on productivity. The program was conducted by CIPM for the Foreign Operations Administration at the request of CNOF and the French National Productivity Committee. In the final report made by this group on its mission, Nordling was unequivocal in stating the case for management training in France:

"The training of future management personnel is surely the principal problem of our industry."

Upon the return of the team to France, study of the problem of management training continued under the National Productivity Committee's Sub-Committee on Personnel Training and the French Institute for Practical Training of Industrial Management, both of which were headed by M. Nordling. (The latter Institute is a non-profit research and study organization created by CNOF and five other French industrial associations.) Both organizations have now passed beyond the study stage and are engaged in establishing an elaborate network of management training programs in the French industrial areas.

New Training Center

In 1953, a recommendation was received by the Productivity Committee from the Institute, with the sponsorship of CNOF, for the establishment of an Advanced Management Training Center which would offer courses to management personnel qualified for advanced study. A request was then made by the Committee to MSA (now FOA) for assistance in two ways: 1) the release of counterpart funds to finance the establishment of the Center until it could become self-supporting by tuition fees, and 2) a second team to go to the United States to study advanced management training methods. The request was approved, and in the spring of 1953 a three-man team came to this country with the special object of observing for one month the methods used in the preparation and organization of advanced management courses. Under the direction of CIPM, they studied the various methods for organizing and presenting management training courses at a number of American management institutes and universities, as well as visiting other management training programs such as the General Motors School, International Harvester School, and the Link-Belt Training Center.

Program is Successful

The Advanced Management Training Center in France has been a reality since last Fall. Its director and instructors have all testified to the invaluable experience gained in America by the second team in seeking the most up-to-date and tested methods of training management personnel. They have also expressed amazement at the comparative ease with which these methods have been adapted in France. Only the case-method technique has encountered serious difficulties in French adaptation.

Industrial training programs are mushrooming all over France, not only under the sponsorship of the Productivity Committee, the Institute, the CNOF, but even more recently by the venerable Paris Chamber of Commerce itself. Extensive success has met CNOF's endeavors in the Paris area, as well as in such "hard-to-sell" areas as Marseilles, Nantes, Grenoble, Poitiers, and Avignon. More and more trainers and teachers are being mustered, textbooks are being written, business case histories and visual aids material are being compiled. National publicity is favorable. Most important, the trainees are tremendously enthusiastic at the benefits and practicality of the courses being offered. With Frenchmen teaching Frenchmen, a barrier is removed which has separated the wealth of scientific management information from businessmen who resent foreign dictation, and doubt the efficacy of adapting new management techniques to French business conditions.

The management training programs in France are almost the exclusive property of private management organizations and associations. It is probably only a matter of a very short time before these programs have no public financial strings attached to them, but, like their American counterparts, will become completely self-financing propositions.

—Robert Gleason

MARCH CHAPTER ACTIVITIES

CHAPTER	SUBJECT	SPEAKER	TITLE	PLACE	DATE
Atlanta	Organization Planning			Atlanta Athletic Club	11
Baltimore	What's Ahead in the Southeast	Addison H. Reese	Exec. V. P., American Trust Co.	Stafford Hotel	2
Binghamton	Effective Management in the Factory	John Williams	V. P., Lipe Rollway Co.	Arlington Hotel	17
Birmingham	Cost Reduction Through Industrial Engineering	R. Conrad Cooper	V. P., Industrial Engineering, United States Steel Corp.	Molton Hotel	9
Boston	Work Sampling	Chester Brisley	Wolverine Tube Div., Calumet & Hecla Consolidated Copper Co.	University Club	4
C. Penn.	Cost Reduction Through Safety	R. K. Meredith	Safety Dir., West Virginia Pulp & Paper Co.	Altoona, Pa.	18
Chicago	Conflicting Time Study Concepts	Burt Flax	Chief Methods Engineer, Zenith Radio		9
		M. W. McDonough	Ind. Engr., International Harvester		
		F. J. Hoyt	Deepfreeze Div., Motor Products Corp.		
	Rebuilding a Company			Furniture Club of America, Furniture Mart	23
Cincinnati	Communications			Hotel Alms—Marie Antoinette Ballroom	4
Clearing	Harvard Case Study	J. M. Duffey		Bethlehem Steel Co.	10
	Maintenance of Machinery and Equipment	J. A. Hartwick		Clearing Industrial Club	11
	Luncheon Meeting			Clearing Industrial Club	18
	Plant Safety	E. Matz		Clearing Industrial Club	23
	Harvard Case Study	J. M. Duffey		Bethlehem Steel Co.	24
Cleveland	Management Looks at Methods Time Measurement	William K. Hobson			3
	Industrial Engineering Round Table	Nevin K. Brothers		Tomlinson Hall—Case Campus, Conference Rm. C	22
	Top Management Round Table	H. D. Luke		Tomlinson Hall—Case Campus, Conference Rm. C	24
	Industrial Relations Round Table	Edwin D. Phillips		Tomlinson Hall—Case Campus, Conference Rm. C	29
	Plant Tour			General Electric Co., Nela Park	
Columbus	What Constitutes Good Cost Control	J. A. Heckert	Professor and Consultant, Ohio State University	Ft. Hayes Hotel	18
Dallas	Dinner Conference	Daniel M. Sheehan	V. P., Comptroller, Monsanto Chemical Company	Melrose Hotel	12
	Dinner in Honor of S.A.M. Wives	Dr. Lillian M. Gilbreth	Management Consultant	Melrose Hotel	31
Dayton	Management Today, An Evaluation			Engineer's Club	30
Detroit	Management Controls for Todays Factory	L. C. Morrow	Consulting Editor, *Factory Management and Maintenance*	Rackham Education Memorial	3
Fox Valley	State Budgets	E. C. Giessel	Director of Budgets & Accounts, State of Wisconsin		11
Greensboro	Experiences as a Member of the Employers Delegation to the International Labor Organization Conference, Geneva, Switzerland for 5 Years	W. L. McGrath	President, Williamson Heating Co.	Starmount Country Club	16
Greenville	Personnel Relations	Guy B. Arthur, Jr.	Guy B. Arthur Assoc.	Hotel Greenville	10
Hartford	Plastics in our Modern World	W. J. Connolly	Asst. Dir. of Public Relations, Bakelite Company		18
Hudson Valley	Our Foremen and Our Freedom	W. L. McGrath	President, Williamson Heating Co.	Hendrick Hudson Hotel, Troy, N. Y.	2
Indianapolis	Can Executives Be Taught to Think	Hector P. Boncker	V. P., Dresser Industries, Inc.		14
		Harold E. Kubly	Dept. of Management, U. of Wisconsin		

CHAPTER	SUBJECT	SPEAKER	TITLE	PLACE	DATE
Kansas City	What S.A.M. Means to Management	Bruce Payne	Bruce Payne & Assoc.	Pine Room, Fred Harvey Restaurant, Union Depot	16
Knoxville	The Walking Customer	M. S. Wigginton	V. P., Distribution, General Shoe Corp.	Farragut Hotel	11
Lancaster	The Automatic Factory	Carroll W. Boyce	National Affairs Editor, *Factory Management and Maintenance*	Hotel Brunswick	16
Lehigh Valley	The Cost Accountant Looks at Scientific Management	R. J. Halloran	Asst. Controller, York Corporation		9
Madison	Executive Development	Hackemann	Hackemann & Associates		3
Manchester	Quality Control	Thomas H. McAuley	Prod. Manager, Chicopee Mfg. Corp.	Carpenter Hotel	3
Milwaukee	Aids for Selling Industrial Engineering to Management	Robert F. Miller	Curtis Publishing Co.	E.S.M. Building, 3112 W. Highland Ave.	12
Montreal	Industrial Engineer's Contribution to Product Design	H. E. Blank, Jr.	V. P., Dunlap & Assoc.	Ritz-Carlton Hotel	10
	Fifth Annual Industrial Engineering Conference			Ritz-Carlton Hotel	19
Nashville	SAM Rating Films				3
	Materials Handling				18
New Haven	Handicapped Personnel In Industry	Henry Viscardi, Jr.	Abilities, Inc.	Waverly Inn, Cheshire	25
New York	New Training Plans for Management Men	Dr. Roy G. Fugal		Roosevelt Hotel	18
Northern New Jersey	Role of the Impartial Chairman	Emanuel Stein	Executive Director, NYU Institute on Labor Relations & Social Security	Essex House	18
Philadelphia	Plant Visitation	A. J. Waring		Lanston Machine Co.	2
	Business Economics	Benjamin Bennett		Poor Richard Club, 1319 Locust St.	2
	Management's Role	H. A. Rotondi		Atlantic Refining Co., 260 S. Broad St.	3
	Scheduling of Preventive Maintenance	J. Abott		Exide Crescentville Plant Conference Room	4
	Union's Role	H. A. Rotondi		Atlantic Refining Co., 260 S. Broad St.	17
	Communications	H. A. Rotondi		Atlantic Refining Co., 260 S. Broad St.	31
Portland	Future of Small Business in Portland			Pacific Power & Light Board Rm., Public Service Bldg.	24
Providence		Phil Carroll			4
Raritan Valley	Cost Accounting As a Management Tool (dinner meeting and plant visitation)	J. E. Lamb	Plant Control Mgr., E. I. du Pont de Nemours	Photo Products Div., E. I. du Pont de Nemours & Co., Inc.	17
Reading	Successful Planning	Phil Carroll	President, Phil Carroll Assoc.	Iris Club, Wyomissing, Pa.	8
Richmond	Multiple Management	Admiral F. J. Bell	National Auto Dealers Association	John Marshall Hotel	30
	Methods-Time Measurement Clinic	Jack Schwab	Jack Schwab and Assoc.		
Sacramento	Executive or Management Development				2
St. Louis	How to Get the Most From People	Fred M. Karches	Director of Operations, Rice-Stix and Company		9
Trenton	Greater Productivity Thru Improved Labor-Management Relations	Solomon Barkin	Research Director, Textile Workers Union of America—CIO		16
Twin City	Satisfying Customer Demands	Andrew Kole		Minnesota Union	11
Western Mass.	Ladies Night	Dr. Lillian Gilbreth		Ivy House, W. Springfield	18
Western N. Carolina	A Philosophy of Management	John E. Bassill	President, American Enka Corp.	Battery Park Hotel	17
Wilmington	New Developments in the Control and Measurement of Fatigue	Dr. L. A. Brouha	Physiologist, Haskell Laboratory of Industrial Toxicology, Employee Relation Dept., E. I. du Pont de Nemours & Co., Inc.	Hob Nob Tea Room	11
Worcester	Improving Union-Management Relations	Clinton S. Golden	Executive Director, Harvard University Trade Union Program	Hickory House	22

PROFESSIONAL NOTICES

CLASSIFIED

POSITIONS WANTED

Industrial Engineer, 31, masters degree, interested in cost reduction through work simplification. Experienced in systems analysis, installation and audit; procedure manuals; forms improvement; sales; cataloguing; general survey and research. SAM Box 375-W.

RATES Classified insertions are billed at $1.50 a reading line per issue for Positions Open and at $1.00 for Positions Wanted. Lines average five words. A heading in bold type counts as two lines. There are 7 lines to the inch. Minimum insertion charge, five-line basis. Display advertisements are carried in this issue at a minimum of 1½ inches. Copy must reach us not later than the 1st of the month preceding date of publication.

Answers to box number advertisements should be addressed to given box number, care of ADVANCED MANAGEMENT, 74 Fifth Avenue, New York 11, N. Y.

POSITIONS OPEN

INDUSTRIAL ENGINEER

National organization engaged in the synthetic textile fibre and organic chemical industries requires a graduate I.E. or equivalent, age 35-45, to direct department of 6-7 people.

Candidates must have a strong background and experience record preferably in the textile and chemical industries, including time study and standards. With considerable emphasis on maintenance labor control. Should also have demonstrated ability in the development and application of standards for accounting and management control needs.

Applicants must be qualified to deal with supervisors, union representatives and accounting personnel on all matters relating to labor standards.

Position is located in the South.

Opening also available for graduate Junior Industrial Engineer with experience in standards data.

Submit complete resume stating age, education, experience and salary requirements.

Box AM 817, 221 W. 41 St., NY 36, NY